

DAILY METAL REPORTER

MONTHLY SUPPLEMENT

METALS

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London, England

DOMESTIC METAL MARKET REVIEW

WASHINGTON REPORT

METAL STATISTICS

JULY
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Two
LINE
Editorials

"Are Taxpayers Human?" asks a magazine article. Maybe so, but they certainly can stand a lot of inhuman treatment.

Archeologists say that cosmetics were used in ancient Egypt, Greece and Rome. But how could they be advertised and sold when there was no television?

"The Courts Have No Authority to Amend the Constitution," says the title of a magazine editorial. Why hasn't somebody mentioned this fact to our Supreme Court?

An agricultural researcher in India says that some plants can hear. Well, we always knew that the corn had ears.

The Weather Bureau announces the development of an "electric brain" machine for making predictions. It is safe to assume, however, that the weather it predicts will be just as unsatisfactory as the weather always has been for ages past.

Mexico City has been sinking at the rate of a foot a year, and they are now preparing to spend \$40,000,000 to stop it. That, presumably, is what the fiscal experts call a sinking fund.

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Washington Report



June 16, 1959

AFTER A WEEK of hearings at which spokesman for the domestic mining and mineral industries painted a bleak picture of their plight, the House Committee on Interior and Insular Affairs favorably reported out a resolution designed to bring aid to the hard-pressed producers. Authored by Rep. Wayne N. Aspinall (Dem., Colo.) of the Interior Committee, the resolution cites the emergency that exists in this field and requests the President to advise the Congress at the earliest possible date as to relief actions taken or proposed to be taken, and to submit any necessary agency reorganization plans or recommendations for legislation.

The resolution declares it the sense of Congress that it is in the national interest to foster and encourage the maintenance and development of domestic reserves and research to promote the use of domestic materials. "Accomplishment of these goals in the interests of national security and the consuming public, without critical dependence upon foreign sources, cannot be accomplished by the maintenance of national stockpiles for single defense emergencies or productive capacity based on foreign material sources," the resolution states.

Warn on Further Delays

The resolution also states that further delays in recovery would cause irreparable damage to mining and mineral properties, wastage of human and natural resources, and loss of productive capacity, and would have a depressing effect upon the national economy and threaten national security. Among the causes of the current condition are the administration of government purchases, contracts, loans, grants, technical assistance, and barter directly or indirectly causing abnormal stimulation of foreign metal and mineral exploration and development, according to the resolution.

Authors of identical resolutions considered by the committee are Representatives Walter Rogers (Dem., Texas), Gracie Pfost (Dem., Idaho), Adam C. Powell (Dem., N. Y.), Ed Edmondson (Dem., Okla.), Walter S. Baring (Dem., Nev.), Al Ullman (Dem., Ore.), John P. Saylor (Rep.,

Pa.), and J. Edgar Chenoweth (Rep., Colo.).

Gov't Action 'Not Effective'

"The immediate problem of domestic mine producers is one of oversupply," Rep. Aspinall said, "but the longer range problem may be one of serious shortages due to deterioration of mines and lost productive capacity. Increased imports at prices lower than domestic mines can meet, have caused abnormal inventory accumulations. As a result, mine operators have had no choice but to curtail or close down production. Government efforts thus far have not been effective."

In the 85th Congress, minerals stabilization legislation was drafted and offered by the Secretary of the Interior as the only acceptable means for alleviating the acute distress of the domestic copper, lead, zinc, fluorspar and tungsten industries and for preserving the mine productive capacity needed in the future. Administration-proposed measures were also considered to aid producers of chromite, beryl, and columbium-tantalum. The Administration's stabilization measure passed the Senate and was favorably reported by the House Committee on Interior and Insular Affairs but was defeated on the floor of the House by a vote of 159 to 182.

In the early days of the present Congress, Secretary Fred A. Seaton stated that the Administration did not then anticipate coming before the Congress with a minerals program which involved subsidies for domestic producers or resembling an

import tax, such as recommended to preceding Congresses.

"Without further government action, no substantial improvement in the situation is in sight," Mr. Aspinall stated. "The world surplus of metals and ore concentrates continues to come to the United States."

"It is my hope, through the record of the hearings, the committee report, and otherwise," he said, "that the President will have information enabling him and the departments to take promptly all necessary administrative measures toward reestablishing domestic mine and mineral production and employment, and that any necessary legislation will soon be enacted."

Study Lead-Zinc Quotas

As one possible means of aiding the lead and zinc industry, Secretary of Interior Fred A. Seaton disclosed that the Government is studying the coverage of the import quota system for both metals to see whether finished products, not now covered, should be included. Mining industry spokesmen have long advocated such action.

When asked if the quota program has been effective and whether it has been of any benefit to the domestic lead, zinc mining industry, Mr. Seaton said it was his impression the quotas have helped.

The Interior Secretary pointed out that U. S. production of lead and zinc has increased in the last year. In the three months preceding the imposition of the quotas, Mr. Seaton said, lead output was 239,000 tons, and in the most recent three-month period for which figures are available some 255,000 tons were turned out, an increase of 7 per cent. Before the quota program, zinc production was 353,000 tons, and for the most recent three-month period rose to 437,000 tons, an increase of 24 per cent. He also pointed out that the price of lead, since import quotas were imposed, has increased one cent a pound.

Mr. Seaton conceded that it is pretty difficult to determine how much of the increase in lead and zinc production was due to the import quota program and how much to the general improvement in business activity.

Keep Scrap Duty-Free

Both houses of Congress have passed and sent to the President a bill to continue for another year — through June 30, 1960 — the suspension of import duties on most types of metal scrap. Affected are imports of such types of scrap as iron and steel, aluminum, magnesium, nickel and nickel alloys.

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A Program for the Lead-Zinc Industry

By R.L. McCANN, President, The New Jersey Zinc Company

WE WELCOME the opportunity to appear before this Committee in support of House Concurrent Resolution 177, and other similar Resolutions, which are directed to the preservation and welfare of the mining industry in the United States. It is the zinc segment of this important industry with which I have been continuously associated in all of its phases for more than 40 years.

These hearings, Mr. Chairman, provide another opportunity for the representatives of a distressed industry, beleaguered by uncontrolled foreign competition, to bring the facts once again to the attention of the Government, which in the interest of the nation can and should provide effective assistance. You are all familiar with the long road the domestic lead-zinc mining industry has traveled since 1952 in its repeated efforts to get relief from the plight in which it finds itself. All admit the urgent need for protecting our industry which is vital to our economy both in peace and in times of crisis. However, the sad commentary is that such recognition has not been followed by effective action. In the meantime, the slow but sure sacrifice of substantial segments of our domestic lead-zinc mining industry on the altar of foreign policy has continued.

Effect on Company

I should like to tell you briefly how the mining operations of our company have been effected by the unreasonable invasion of our markets by low-cost foreign zinc and products of zinc, and to suggest factors to be considered in determining the measures required to meet the conditions with which we as an industry and we as a nation are faced.

The New Jersey Zinc Company has been in the business of mining and smelting zinc ores in the United States for more than 100 years. We have fully developed mining properties in the States of Colorado, New Jersey, New Mexico, Pennsylvania, Tennessee, and Virginia. The ores that we mine at these properties are smelted at our two smelting plants located in Pennsylvania and Illinois.

Some of these mining properties

Statement before House Interior subcommittee on mines and mining, June 29, 1959.

METALS, JULY, 1959

have been in operation for many years, and others are relatively new, having been developed as the result of an extensive exploration program over the past decade. They are all good properties and could supply a substantial amount of the zinc required in this country.

But this is what happened to us during the past three years. Encouraged by the stockpiling program, and by other measures for which our Government was responsible, lead-zinc mining in foreign countries expanded by leaps and bounds. When the Government discontinued its stockpiling program in 1957 and it became no longer possible for foreign producers to place substantial parts of their production in our stockpiles, they literally dumped their excess production into our markets. By reducing their prices to a level at which many domestic mines could not afford to operate, they displaced our domestic production and chaos resulted in the United States lead-zinc mining industry.

We had to shut down our large mine in New Jersey, and it is still shut down. We had to shut down one of our mines in Virginia, and it is still shut down. At our other mine in Virginia we had to reduce production by 50 per cent, and it is still at that level. We had to shut down our mine at Hanover, New Mexico, and it is still shut down. We have been forced to maintain the closed mines at very considerable expense in order to protect them. Our other mines are still operating, but I can assure you that it is a matter of continuing decision as to whether they remain in operation. Our entire mining operations are literally on a month-to-month basis. Before all this happened, we employed about 5,300 people; today we employ about 3,800 people.

We have considered ourselves one of the stronger companies in the zinc mining business. This foreign competition has been a serious blow to our company, and it has had even more drastic effects on the scores of smaller mining companies. You have heard much about their situation in other testimony. I only want to say that these medium and small mining operations, of which there are many, are of real importance to the mining industry and to our economy. The problems

are the same whether the mine is small or large or the operating company is small or large.

Exploration Productive

Some timid souls have suggested that the lead-zinc mining industry in the United States is a dying industry and that the ore reserves, and the potential for finding more ore, do not justify the efforts necessary for preserving the industry as an important and necessary segment of our economy. Nothing is farther from the truth. Ore reserves of zinc in the United States are, in my judgment, as strong as they ever have been, and exploration over the past decade has been very productive.

I cite our company's exploration efforts as an example of what has been done. We decided a number of years ago to concentrate our exploration in the United States. The results have been highly gratifying. We have discovered and developed three new mines and, given a reasonable price for zinc in the United States market, we could open additional mines from reserves already discovered. And I am confident we can find new reserves. Our experience has not been unique. Exploration by others in the zinc and lead industries in recent years has been satisfactorily productive.

So let us be done with those who, through selfishness or ignorance, intimate that the domestic lead-zinc mining industry is on the decline. In my judgment there are adequate mines and reserves available today for the zinc mining industry in the United States, operating at an optimum rate, to produce not less than 60 per cent of the zinc required in this country for a long span of years ahead. All the industry needs is reasonable protection from foreign producers who will continue to flood our markets at unreasonably low prices.

Results of UN Meeting

Perhaps it is appropriate for me to comment on the results of the recent United Nations conferences on the lead-zinc problem. I feel that a great deal of false optimism has been generated in some quarters over the results of these conferences. It has been suggested that the agreements reached are supposed to achieve world balance in lead and zinc supplies, but in assessing these alleged ac-

complishments the contribution of the United States mining industry seems to have been completely overlooked. In the case of zinc, when all of the statistics have been shaken down, it is apparent that at best this balance will be achieved only if our United States zinc mines remain on the depressed and unprofitable production rate they are on now — around 450,000 tons per year. This is 125,000 to 150,000 tons less than our industry must have in order to achieve that solid economic strength which it has enjoyed in the past. Mines already closed will have to remain closed, and those still operating will probably continue on the present precarious basis. As I see it, the United States mining industry will be powerless to do anything about it if these conditions are permitted to continue. Under the present quota plan some 530,000 tons of zinc metal and ore concentrates can come in each year. All that foreign producers have to do to assure themselves of this exorbitant share of the United States market is to hold prices at a level that will keep down United States mine production so that the domestic mines cannot invade that part of our domestic market which the present quota plan has set aside for the foreign producers.

So, while much is to be said for the general purpose and the time and effort put to the problem by the several nations, nothing that has been done goes far enough to be of any help to our domestic mining industry. I am certain, Mr. Chairman, that we are left with the task of curing our own problem in our own way.

Suitable Price Needed

The United States market for zinc products is the largest single market in the world. We submit that some realistic thought should be given to the proportion of this market which can be efficiently supplied by a sound domestic mining industry with a reasonable share left to foreign producers. I have indicated earlier that I believe that under proper conditions the United States mining industry operating on a sound basis can produce about 60 per cent of the zinc we need. Translated into tons, this is equivalent to about 600,000 tons per year at current levels of consumption. The level of United States mine production will be determined by price. The better the price, the better will be the chance of U. S. mines operating at a reasonably normal level. I believe that at a price of 13½ cents the United States zinc mining industry can produce between 50 and 60 per cent

of what we need. It seems only reasonable that this or any other domestic industry should participate in its own home market to that extent. The important point to bear in mind here is that with a price sufficient to produce approximately 60 per cent of what we need many mines will be operating and very likely at a reasonable profit, but if the industry is compelled to limp along at a 450,000 ton level, then many mines will remain closed, and those that do remain open will be exhausting their resources just to stay in business, at little or no profit. So, the resolution of the domestic mining problem must be by means that will assure the domestic mines of a price that will encourage production from many mines that are now closed.

A number of methods for maintaining a workable price for United States lead-zinc miners have been suggested. Stockpiling, an expensive and limited term proposition, was of necessity only a temporary palliative which, rather than getting at the core of the problem, in the end aggravated it by encouraging expansion of foreign production. It had to come to its logical end. A subsidy plan was advocated last year, but that fortunately was discarded.

Program for Industry

It seems to me that there are three practicable and sound ways in which the objective of protecting the lead-zinc mining industry can be attained. One is by means of an adequate tariff; another is by means of a sufficiently restrictive but flexible quota; and the third is by some possible combination of the two.

The present quota plan is so liberal in its allocation of imports that it leaves foreign producers pretty much in control of our market prices and leaves the domestic mining industry a very poor share of the market here and little prospect of increasing it until consumption grows. If a quota plan is to work, it must be one such as that provided in H. R. 7721, introduced by the Chairman of this Committee, designed to permit foreign imports only to an extent consistent with a sound domestic industry. Before addressing myself to this plan, I should like to consider an alternative solution—an adequate tariff.

For a number of years the Emergency Lead-Zinc Committee has taken the position that an adequate tariff is the most practicable method of curing the disparity in labor costs. But for some reason this obvious and proven method of doing the job has been pushed aside. We

concur with the Emergency Lead-Zinc Committee that the best means of control of imports to revive the domestic mining industry is an adequate tariff, and I submit to you for your consideration legislation that is now pending in the House and in the Senate, which would accomplish the purpose. This is in H. R. 7722 and S. 2169, both of which have been supported by many of you and your colleagues in the Congress.

In addition to providing an adequate tariff, this proposed legislation contains a provision which I believe to be essential in the creation of a workable tool for the job at hand. It provides a compensatory tariff on the lead and zinc content of certain manufactured articles. This is necessary because controls apparently are made to be avoided if possible, and it has already been demonstrated that a basic control can be threatened or defeated if loopholes are left.

The proposed legislation contains another important provision which would suspend the tariffs when the prices of lead and zinc in the United States market are maintained at levels of 15½ and 13½ cents, respectively, for given periods. This represents not only a means of protecting our consumers from uneconomic price levels but also of benefiting our foreign sources of supply by recognizing the freedom of trade than can exist when prices are at levels that are economic for all and markets here are not exploited by low priced foreign goods.

Sound Quota Plan

While I feel that adequate tariffs are the simplest and best solution to the problems of our industry, a sound quota plan can also do the job. The reasons why the quota plan now in effect is totally inadequate have already been indicated. The present plan seems to be working in reverse. It gives to the foreign producers a liberal fixed quantity well over half of our current market and leaves what is left, however small it may be, to the United States mining industry. It has always been my impression that a quota plan ought to work the other way around and that quotas should be for the purpose of adjusting the level of imports to a rise and fall in demand. Furthermore, the present plan has left many loopholes by which its basic purpose can be, and is being, circumvented, thereby making it still less effective than it was intended to be. However, these defects could be remedied.

As already mentioned, there is now

(Continued on Page 13)

The Copper Picture—Present and Future

By H. J. ARNOT, Vice President, Reading Tube Corp. and Reading Metals Refining Co.

THE PURCHASING, sorting, preparing and marketing of scrap metals is a most important function and plays a vital part in both the ferrous and nonferrous phases of the metal, not only at home but also abroad.

The production capacity of our domestic mines in 1956 and 1957 represented 51 per cent of the nation's copper supply or an annual production rate of 1.1 million tons. Imports account for another 28 per cent and recovery from "old scrap", 21 per cent. The nation's supply of copper ore at present levels and cut-off points of production and costs is estimated to be good for another 30 years. Hence, it is obvious that the greater the part that scrap can play in the whole picture will lengthen out the life-line of our nation's copper supply.

I feel that too few of us fully understand why the price of copper is where it is. Consequently, I would like to elaborate on some pertinent facts. The cost of producing copper in itself varies greatly between individual producers by virtue of the type of mining operation and then also the grade of ore (copper content) at the various locations. This is not quite as true in the producing of aluminum and steel from the ore that they have available for those metals.

The copper industry in the United States is currently producing about a million tons of copper a year with a current sales value of approximately 600 million dollars. To get this one million tons of copper, the industry must mine more than 100 million tons of ore with an average recoverable copper content of under one per cent. In addition, the copper industry must remove over-burden at the open-pit mines probably to the extent of at least another 100-million tons.

The steel industry is currently producing about 100 million tons of steel with an average value of \$100 a ton so that its gross product is worth 10 billion dollars. To produce 100 million tons of steel, the steel industry uses only slightly more than 100 million tons of iron ore which has an average content of between 50 and 60 per cent iron. The balance of the metal



H. J. ARNOT

requirements of the steel industry is recovered from scrap.

The aluminum industry is producing about 1,800,000 tons of aluminum a year with a current value of about \$500 a ton so that its gross value is approximately 900 million dollars. To produce the aluminum, it handles bauxite in the amount of roughly 4 tons of bauxite for each ton of aluminum. Thus, the aluminum industry requires only slightly over 7 million tons of bauxite a year. Now let us put these facts another way. The copper industry has a product worth only 6 per cent of the value of the product of the steel industry but it must mine as much raw material as the steel industry. Since the cost of mining varies only with the nature of the rock and not with the metal content, it is quite apparent from the figures cited that the mining cost factor in producing steel and aluminum is only a fraction of the mining cost factor in the production of copper.

The heavy costs in the production of steel and aluminum are in the processing. This involves fuel, power, labor and supplies, and the cost of these is roughly the same for all producers. Thus, we may have costs two to three times the cost of the lowest producers whereas in the steel industry, or in the aluminum industry, the variation among the principal producers is not more than 20 to 25 per cent.

Moreover, because the bulk of the cost involved in the production of copper is in mining, the peculiar social problems that arise due to the

isolation of mining communities, lack of employment opportunities, etc., bear much more heavily on the copper industry. This means that copper producers are notoriously reluctant to reduce production when there is a falling off or sharp drop in demand and this in turn is the cause, in part, for sharp fluctuations in price. Steel and aluminum producers can more readily vary their production rates.

All of the above may be a little confusing so let's boil the facts down to this simple language: (1) From one ton of iron ore the recovery in high grade steel is 43 per cent. (2) From one ton of bauxite the recovery in aluminum is 25 per cent. (3) From one ton of copper ore the recovery in pure copper is just about .8 of a per cent.

Present Picture in Copper

I have been asked to address you on the subject of the copper picture—present and future. This is a very broad and confusing picture. Therefore, I approach the interpretation very humbly. For the sake of clarity, I prefer to look at the situation in two parts—present and future. The present picture, that is the next few months, is very confused and is open to numerous interpretations. Foremost in everyone's mind is the possibility of strikes. Within two weeks most of the primary copper industry in this country could be on strike. Whether or not there will be a strike at several or all of the producing operations cannot be answered at this time. Much depends on the firmness of the various union demands. That is, are they merely window dressing to establish a bargaining position or are they prepared to strike for large wage increases, 32 hour weeks, extended vacations, S.U.B., etc. What effect would such a strike have? A strike of a month or so probably would not have a very serious effect on the fabricators. First of all, there is an estimated 6 weeks' supply of raw material on hand for the fabricators and in addition, there are some 225 thousand tons of copper in inventory in Europe. To further ease the squeeze on the fabricators, most of them will be on vacation for a two-week period during July or early August. Thus, a strike of even a month or more would have very little effect on the required supplies, but

Text of address delivered at conference of the National Association of Waste Material Dealers on June 18, 1959, in Louisville, Ky.

would undoubtedly raise the price of imported copper. A strike of longer duration would have far more serious consequences as inventories at home and abroad are used up. One of the most serious consequences of a prolonged strike would be sky-rocketing prices until supply caught up with demand again. The use of the government stockpile to ease the shortage during a strike is at this point most unlikely. Although its use at the end of a strike to alleviate severe shortages is a definite possibility, according to some government sources.

Should strikes be avoided, what then of the immediate future? The big question here is have the fabricators and the users over-bought in the past months in anticipation of a strike? If so, demand will undoubtedly drop off during the third and fourth quarter. In general, it would appear that due to the pick-up in housing starts and a rather firm automobile market, the tubing business is considerably better than last year even with high imports. However, the cable makers seem to be in the doldrums and their lack of business accounts for the major portion of the 48 thousand ton drop in usage reported for April of this year. So much for a very confused picture of the immediate future which undoubtedly will not be clear to most of us until new labor agreements are signed both in the copper and steel industry and the supply and demand requirements is on a more realistic basis.

Now for the future of copper — a picture that is composed of many factors: supply and demand, the possibility of substitutes for copper, imports and tariff policies, international agreements, etc.

First of all, let's look at the supply situation. During the first third of this year primary production of copper was at the annual rate of 3,400,000 tons per year in the free world. This is an increase of 365,000 tons over 1957 which was the record year to date. The maximum production in any previous year was 3,035,000 tons achieved in 1957. Thus, production in 1959 is running more than 10 percent above the previous peak year. In addition I can safely state that within the area covered by the Copper Institute's figures, additional capacity of at least 250,000 tons a year will be available by the middle of 1960. This includes the new Toquepala Project in Peru, The El Salvador Mine in Chile, and the additional capacity that will come from the Mount Isa Mine in Australia and the Bancroft in Northern Rhodesia.

Other projects under way will bring the capacity within the Copper Institute's area within the next 3 or 4 years up to a position of as much as 4 million tons of refined copper annually. This will mean that the capacity will not be the limiting factor in meeting increased consumption that it has been in previous years. Unless there is a far greater consumption than has ever been anticipated up to this time, the above increased capacities and total output should have the much needed effect of stabilizing prices.

In addition to the increased tonnages of primary production, there is every reason to believe that increased tonnages of scrap will also become available as the old is torn down to make way for the new and the role of the scrap metal dealers will become increasingly important.

Stockpile Problems

Now let us take a look at the situation in regard to the government stockpile of copper. This is a very controversial subject which came to a boil about a month ago and is still simmering away in Congressional and other circles. It seems to me that a proposal made recently by Anaconda chairman, Clyde Weed, that the government sell surplus copper from its stockpile when the market price rose above 35 cents a pound would have a great deal of merit. However, this proposal seemed to meet with very little enthusiasm in either administration or congressional circles. A bill has been introduced into Congress which would impound the DPA material, which approximates some 250,000 tons, permanently, in the strategic or supplemental stockpiles. Once placed on either one of these stockpiles, it could be released only by Congress in time of peace or by the President in time of emergency.

I think we must all agree that the Government should be run on a businesslike basis. It is good business to consider the disposal of surplus commodities which represent not only the tremendous capital outlay but also result in considerable expense for storage, record keeping, maintenance and a host of other costs. To further complicate the stockpile question, certain international agreements have to be considered such as trade balances, trade negotiations, tariffs and re-routing of strategic commodities away from the United States to restricted markets. Regardless of its complexity, this problem of the stockpile of copper must be resolved so that it is no longer a source of conjecture and speculation, thus eliminating one disturbing factor of the market.

Substitute for Copper

Now let us look briefly at the effects of substitutions on the end use of copper products. Here we are confronted with a fact that successful substitution of aluminum, plastics, yes, even iron and steel, for copper, in almost every field, has occurred and apparently is increasing each year. This has occurred for several reasons: (1) copper was not the most suitable technically; (2) copper was not economical; and (3) copper was not available. These substitutions are the results of normal advances in technology and changes in metal economy. The substitution of aluminum and plastics is in no small part due to the aggressiveness of the aluminum and plastic producers and fabricators. This type of competition must be met by the copper industry with the same type of aggressive research and salesmanship. I do not wish to minimize the effect of these substitutions but they apparently have had very little effect on primary production. As far as I know, no mine smelters or refineries are out of business because of competition with these other materials. I must agree, however, that some fabricators are seriously affected but at the same time, many of these are in a position also to fabricate aluminum and plastics.

Foreign Competition

Now let us look at a more serious type of condition — foreign competition. Before World War II, we exported an annual quantity of 50 million pounds of brass mill products. Imports were negligible. With the reduction in tariffs, resulting from the Trade Agreements Act, the situation changed radically and imports increased enormously so that in 1958 they had reached 154 million pounds while exports had shrunk to 13 million pounds. Now, let's put this another way. The industry's over-all loss of sales due to foreign competition has reached an annual figure of 190 million pounds. These facts, translated, are that this tonnage represents just about a year's work for approximately 3,000 production workers. We can readily say that in one way or another, the equivalent earnings and purchasing power represented by this lost production have disappeared by virtue of such competition.

If imports had grown to this volume on the basis of fair competition, there could be little or no complaint. But behind all this there is a most important reason. For the answer we must look at the comparison of wage scales here and abroad where they are from one-third to one-tenth of ours. Since

(Continued on Page 13)

U.K. COPPER MARKET WEAKNESS DUE TO INCREASING WORLD PRODUCTION AND UNLIKELYHOOD OF STOPPAGE

Trading in Tin Gives Impression Metal Is Firmly Under Control of the Buffer Stock Manager; Lead Disappointing; Sentiment in Zinc Improved

July 7, 1959

WITH prices on the London copper market falling about £20 a ton in June and weakening further in early July, the situation certainly has not developed in the way that had earlier been expected. Although at the time of writing it is still uncertain whether a strike will develop in the U. S. producing industry or not, the general expectation here now is that there will be no strike. In recent weeks this conviction has been getting stronger, coincidentally with increasing evidence of the fact that full-scale production is in excess of the world's industrial requirements at the present time by quite an appreciable margin.

It is of course these two factors together which have depressed prices: and with the normally quiet summer months at hand, it would be somewhat rash at this stage to venture an opinion as to whether the substantial fall which has already occurred in prices has fully discounted all the unfavorable features in the situation. In America, although fabricators and their customers are understood to be heavily stocked at the present time as a precaution against a possible strike, producers' stocks being at a fairly low level could be added to in the next month or two without causing any top-heaviness in the domestic situation.

Outside the U.S.A. on the other hand, producers' stocks have been building up in recent months and, although not at all excessive in view of the length of the pipelines involved, are nevertheless beginning to attract attention, whilst consumers' stocks on the other hand are probably very moderate. From a broad consumption point of view, once the holiday season is out of the way, the world picture looks quite a hopeful one. Both in America and in Europe the economic outlook is regarded hopefully and this should mean that requirements of copper should expand. What is not at all clear, however, is whether any such expansion in consumption will be immediately reflected in prices, in view of the fact that there seems to be, on a world basis, a fair amount of

By L. H. TARRING
London, England

productive capacity at present in excess of actual industrial needs.

The question of an alternative method of pricing contracts, with European consumers continues to attract a good deal of attention, particularly on the part of the African producers, and further talks between consumers and producers have been held in London to explore the situation further. At the moment, however, the indications are that the differences of viewpoint of the two sides are still quite considerable, notably with regard to the question of what alternative producers can offer for the hedging facilities currently available to the consumers through the London Metal Exchange, especially as they are buying their copper on the basis of LME prices.

Nevertheless, if no agreement is reached in the current discussions, it

U. K. COPPER STATISTICS

U. K. production of refined copper in April was 10,053 tons of primary and 8,140 tons of secondary compared with 7,727 tons and 7,990 tons respectively in March, according to the British Bureau of Non-Ferrous Metal Statistics. Stocks of refined copper declined slightly at 61,080 tons (62,200 tons) but blister rose to 11,238 tons (10,746 tons). Of the refined stock consumers held 38,259 tons (35,296 tons). Full consumption details are given below:

	Mar.	Apr.	4 mos. ending
Unalloyed Copper Products	1959	1958	1959
Wire (1)	18,770	89,071	73,369
Rods, bars & sections	1,847	7,117	6,790
Sheet, strip & plate	5,477	19,345	18,838
Tubes	5,998	20,086	20,960
Castings & miscellaneous	650	2,600	2,600
Alloyed Copper Products			
Wire	1,468	5,412	5,655
Rods, bars & sections	12,801	41,970	44,577
Sheet, strip & plate	8,953	31,367	32,963
Tubes	2,098	8,136	7,278
Castings & miscellaneous	7,205	25,246	25,152
Copper sulphate	2,863	9,642	12,826
Total all products	68,130	259,992	251,008

Copper content of output 55,524 216,909 204,227
Consumption of refined copper (2) 43,015 169,667 154,729
Consumption of copper & alloy scrap (3) (copper content) 12,509 47,242 49,498

Notes: (1) Consumption of H. C. copper and cadmium copper wire rods for wire and production of wire rods for export.

(2) Virgin and secondary refined copper.

(3) Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.

looks as if further attempts will be made to find some means of achieving greater stability in prices, at any rate for primary copper. In this connection it is perhaps worth drawing attention to the fact that, although the London Metal Exchange continues to be generally regarded as the "villain of the piece" as far as price fluctuations are concerned, the lead in this matter for months past has, in fact, come from the Commodity Exchange in New York.

Although Comex is regarded here as being much more of a speculative market than the LME, the volume of business which has been transacted there in the past year or so has been such that the possibilities open for arbitrage business whenever the margin between the two markets widens have made it inevitable that London should follow the New York movements.

It is very interesting to note that in its annual report the British Non-Ferrous Metals Federation includes an estimate of U. K. consumption in 1963, showing an average annual increase over 1958 of 2.3% made up as follows:

	Copper Content		Percentage annual increase
COPPER:	1958	1963	1958-63
Wire	199,400	220,000	2.1%
Rods, bars and sections	18,400	20,000	1.7%
Sheet, strip and plates	45,000	50,000	2.2%
Tubes	45,600	48,000	1.1%
COPPER ALLOY:			
Wire	10,300	12,000	3.3%
Rods, bars and sections	68,400	81,000	3.7%
Sheet, strip and plates	54,200	63,000	3.2%
Tubes	10,700	11,000	0.6%
Total	452,000	505,000	2.3%

Buffer Manager Operations

In general, the tin market here gives the impression that it is firmly under the control of the Buffer Stock Manager. Prices have moved up a few pounds over the past month but there seems to be plenty of evidence that the International Tin Council is not anxious to see prices advance very far and it is firmly believed in some quarters that it is not deemed desirable for quotations to move over about £800 a ton for fear of arousing a certain amount of antagonism from the main consuming countries.

Moreover, the producing countries,

AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD			ZINC		
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Month	Following	Current Month	3rd Month	Following
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages	248	17	11	239	17	7	249	0	11	719	8	11
1955 Averages	351	14	11	341	0	3	352	5	6	740	2	12
1956 Averages	328	14	5	324	13	1	329	1	8	787	14	9
1957 Averages	219	8	10	221	0	3	219	12	10	754	15	4
1958												
January	171	7	5	174	0	5	171	10	11	730	15	5
February	162	17	9	164	2	11	163	0	9	731	11	0
March	170	2	9	177	4	5	170	5	11	731	5	9
April	175	12	0	176	18	6	175	15	0	731	0	3
May	178	15	11	180	15	5	178	19	1	730	15	11
June	194	12	3	196	3	8	194	15	6	732	16	8
July	199	16	4	200	11	8	199	19	9	731	4	2
August	205	16	3	206	1	2	205	19	6	730	9	0
September	209	6	3	209	8	6	205	9	1	718	11	2
October	236	5	9	229	15	5	236	13	1	740	16	9
November	242	19	6	236	11	9	243	4	3	757	12	6
December	220	19	11	220	14	8	221	2	10	756	9	1
1958 Averages	197	13	3	197	9	3	197	16	11	734	17	11
1959												
January	230	2	0	227	5	10	230	5	0	758	15	6
February	236	4	2	235	10	8	236	7	6	772	9	0
March	248	10	3	247	12	2	248	13	6	779	14	9
April	240	0	5	249	6	6	240	3	5	782	5	3
May	236	4	2	236	11	6	236	6	9	784	4	8
June	230	0	11	230	0	4	230	3	8	789	7	0

although some of them at any rate would probably like to see rather higher prices, are at the moment mainly concerned with getting larger export quotas. This can only be expected when the Buffer Stock has reduced its holdings to the desired level, whatever that may be. Some unofficial reports have estimated that it now amounts to about 14,000 tons but this can be no more than a "guesstimate."

The situation in this respect has not been helped by the announcement that the British Government is to dispose of its remaining stockpile of tin totalling 5,000 tons. Of this, 2,500 tons are to be sold through the Buffer Stock Manager beginning July 1, subject to the same price conditions as govern liquidation of the Buffer Stock itself. Disposal of the remaining 2,500 tons will begin on January next but the Government has not yet decided whether this also will be sold through the Buffer Stock or whether it will be disposed of through the open market in London. The London Metal Exchange, of course, is

U. K. LEAD STATISTICS

Lead stocks in the U. K. at the end of April were 62,286 tons (53,751 tons imported and 8,535 tons English refined) compared with the March total of 53,289 tons (45,156 tons and 8,133 tons) according to the British Bureau of Non-Ferrous Metal Statistics. Production during April rose to 7,616 tons compared with 6,551 tons in March. Full consumption details are given below:

	4 mos. ending	Apr. —	30th Apr. —	1959	1958	1959
Cables	8,341	35,444	32,263			
Batteries — as metal	2,235	10,319	9,495			
Battery oxides	2,257	9,583	8,818			
Tetraethyl lead	1,524	6,585	6,887			
Other oxides & com- pounds	2,637	8,002	8,765			
White lead	735	2,894	2,598			
Shot (incl. bullet rods)	1,400	1,378				
Sheet and pipe	6,170	21,781	21,639			
Foil & collapsible tubes	296	1,498	1,152			
Other rolled & extruded	609	1,913	2,082			
Solder	1,309	4,483	4,731			
Alloys	1,637	5,928	6,525			
Miscellaneous uses	1,104	4,208	4,450			
Total consumption	29,252	113,405	110,783			
of which:						
Imported virgin lead	14,794	56,770	56,182			
English refined	7,230	25,990	24,012			
Scrap including re- melted	7,228	30,645	30,589			

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pressing that the latter course should be adopted.

Despite this addition to currently available supplies of tin, the market showed practically no reaction. Russian exports so far this year have been quite moderate and with quite good consumption prospects in America and elsewhere, it looks as if steady conditions will continue for the time being.

Lead Disappointing

The lead market has continued to be a rather disappointing affair. Although there has been an improving statistical trend in the United States, the supply position elsewhere is a definitely easy one. Consumption seems to be quite steadily maintained but shows little signs of broadening very noticeably, at any rate outside the United States. The market therefore anticipates that there will con-

tinute to be a certain amount of surplus production and this is sufficient to hold prices down to a level which is not at all satisfactory to producers.

In the U. K. it is noteworthy that in the first five months of this year imports were up to 38,252 tons, compared with only 58,841 tons in the same period of 1958 although consumption is actually somewhat lower.

The proposals introduced by Senator Murvay in America for a 4 cents tariff if the price of imported metal drops below 15½ cents is not regarded with much favor on this side of the Atlantic although, at the moment, few people seem to think that anything quite as drastic as this will be approved by the United States Legislature. The London quotation is low in relation to the United States market but this, of course, is of little significance nowadays owing to the limitation of imports by quota.

An interesting item was the refer-

U. K. ZINC STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics U. K. zinc stocks rose slightly to 38,643 tons compared with 38,457 tons at the end of March. Of the April total consumers held 16,871 tons. Production during the month was 5,424 tons, a decrease of 1,588 tons compared with the March total of 7,012 tons. Consumption details are given below:

	4 mos. ending	Apr. —	30th Apr. —	1959	1958	1959
Brass	9,738	33,381	35,606			
Galvanizing	8,062	29,175	31,726			
of which:						
General	2,808	10,930	10,799			
Sheet	1,915	6,722	8,435			
Wire	1,938	7,324	6,656			
Rolled zinc	2,074	8,262	8,196			
Zinc oxide	2,347	9,613	9,524			
Zinc diecasting & forming alloy	3,951	16,791	16,074			
Zinc dust	904	3,351	3,683			
Miscellaneous uses	930	3,710	3,605			
Total all trades	28,006	104,283	108,414			
of which						
Slab zinc						
High purity (99.99%)	4,291	18,680	17,355			
Electrolytic & high grade (99.95%)	5,764	20,379	20,854			
G.O.B. Prime West- ern & debased	10,198	37,265	40,170			
Other virgin material	220	1,115	838			
Remelted zinc	479	1,732	1,889			
Scrap (Zinc content)						
Zinc metal, alloys & residues	2,618	10,378	10,880			
Brass & other copper alloys	4,436	14,739	16,428			

METALS, JULY, 1959

ence in his annual statement by the Chairman of Penarroya to the idea which he said was making progress. He claimed that both producers and consumers were aware of the inconvenience of daily fluctuations and said that this new spirit led him to think a more stable price, linked to the cost of mining would be established in large consumer areas. This is undoubtedly what the French mining industry would like to see but whether it is in fact approaching realization is perhaps open to doubt.

Zinc Sentiment Better

There has been a further improvement in zinc prices here during the past month and sentiment with regard to this metal is, on the whole, quite cheerful. It is true that there is quite a bit of productive capacity in reserve at the present time, so that even if consumption pursues its recent upward trend there seems little danger of any scarcity of supplies.

This is particularly so since some leading producers in exporting countries are fairly content with a price around £80 a ton and would certainly much rather see full production at this level than a curtailed output—or limited exports—at some higher figure. Meanwhile, the ore situation is becoming an interesting one, with a tendency for sellers to get better terms from the smelters owing to competitive bidding between the United States Continental Europe and Japan.

The possibility of some interesting developments in the future arises from the fact that, as far as can be seen, U. S. domestic mine output plus ore import quotas will be insufficient to meet the full needs of the American industry.

Current thinking here is along the lines that this will probably lead later on to import quotas being dropped and some additional protection in the shape of higher import duties given to the domestic mines. It is not, however, expected that the 4 cents a pound tariff below 13½ cents for imported zinc which has been suggested in the Murray Bill will be approved.

Metal Powder Federation to Move Offices in N. Y.

Effective July 28 the headquarters of the Metal Powder Industries Federation will be located at 60 East 42nd Street, New York 17, N. Y. It is currently located at 130 West 42nd Street, New York 36.

Lead-Zinc Program

(Continued from Page 8)

pending in the House H. R. 7721, introduced by Congressman Aspinall, which embodies a fair and reasonable flexible quota plan. This legislation would retain the basic principles and administrative features of the existing quota plan but would establish realistic initial quotas, provide automatic adjustment of quotas to the consumption level in the United States, and close the loopholes that now exist with respect to certain products containing lead and zinc which come in outside the quotas and can substantially defeat their purpose. It also has a provision for cut-off points of 15½ cents and 13½ cents for lead and zinc, respectively, at which points quotas automatically become less restrictive. I commend this legislation to you for your consideration as an effective means of providing the necessary protection for the domestic lead-zinc mining industry.

I wish to take this opportunity to commend those who sponsored House Concurrent Resolution 177, and similar Resolutions, which evidenced a recognition of the need for a constructive approach to the problems of the mining industry, and I urge favorable action on this resolution by this Subcommittee and by the Full Committee. I further urge that full support be given to the legislation that has been referred to here today so that necessary protection of a vital industry may be achieved either by an adequate tariff or by an improved and flexible quota plan.

Yugoslavia Boosts Exports of Nonferrous Products

At the annual convention of the Yugoslav Association of non-ferrous metal manufacturers held in mid-April, it was noted that this branch of industry played a very substantial role in Yugoslav exports.

The increased exports of semi-finished non-ferrous metal goods were so conspicuous last year that the price drop in refined lead, aluminium, zinc concentrate, mercury, etc. did not affect the Yugoslav balance of payments.

The favorable tendency toward altering the structure of these exports was likewise continued, deliveries of semi-finished and finished products having been increased at the expense of raw materials.

The Copper Picture

(Continued from Page 10)

the war there has been a constant program of rehabilitation and modernization of their brass mills, and enthusiastic application of modern methods and practices, which foreign productivity teams avidly absorbed in their visits to our mills. Many of these visits, if not most of them, were arranged for by our State Department in a national policy of trying to help our friends across the water to recoup their losses and again stand on their own feet. Of course, they had the benefit also of their own capable management which when enriched by their educational trips, contributed to a vast improvement in the productivity which in many cases now approaches ours. This applies not only to direct labor costs but also to the many indirect labor and other costs which vary closely with the wage rates.

You say, what of tariff protection? Here are some figures that I think should prove interesting and constructive. In 1934, as an example, the price of a typical brass tube was 17c per pound. The duty was 8c or 47 per cent. In 1959, the price of the same tubing was listed at 50c and the duty was 2c or 4 per cent and this situation to this day still exists. Can there be any question as to why the copper and brass fabricators insist that they be given an increased and fair tariff protection.

Not only do other countries have much higher import duties but even these higher duties are often academic since they use very restricted import licensing systems which would exclude the importation of our products even if we could compete against their extremely low wage rates. This type of competition is completely unfair to an industry as vital to our national defense as the copper and brass industry and we are at this moment beseeching the administration and Congress for increased protection against this unfair competition. In fact, all we ask is a sliding scale tariff that equalizes wage rates or the establishment of some quota system to minimize this unfair competition.

Die Casters Will Convene in Chicago Sept. 16-17

The 1959 annual meetings of the American Die Casting Institute and its research arm, the Die Casting Research Foundation, have been set for September 16 and 17, 1959 at the Edgewater Beach Hotel, Chicago.

SAGGING COPPER MARKET BOLSTERED BY CUTBACKS IN OUTPUT; PRODUCERS AT 30c, CUSTOM SMELTERS 29½c

Phelps Dodge, RST Initiate Production Curtailments; Lead Quiet, Zinc Demand Slackens on Steel Strike; Tin Prices Ease; Quicksilver and Titanium Decline

July 16, 1959

COPPER prices changes and announcements of curtailments in copper production made most of the news towards the latter part of the month in review. The drop of 1.50c in the primary producers' electro copper quotation to 30.00c on July 14 and 15 was sandwiched between a half cent decline in the custom smelter electro price to 29.00c on July 13 and a half cent advance to 29.50c on July 16.

The lead price was steady at 12.00c New York despite light demand. Zinc made the best showing statistically but was unchanged pricewise, with the uncertainty about the steel strike a strong market factor. Aluminum prices were firm, with labor talks in the industry under way. Tin prices eased as platers stayed out of the market. Silver and platinum were steady, with quicksilver weaker.

Copper Price Movements

Before the custom smelter electro copper quotation bounced back a half cent on July 16 to 29.50c delivered, the price had moved down in half cent stages on June 24 (to 31.00c delivered), on June 25, on June 29, on July 7 and July 13 (to 29.00c delivered.) On July 13, the spread between the custom smelter and primary producer quotations had widened to 2.50c, and it was a foregone conclusion that such a spread was untenable. Two major producers, Kennecott and Phelps Dodge, reduced their prices 1.50c on July 14 to 30.00c, and Anaconda took similar action on July 15.

The half-cent declines in the smelter quotation stemmed from sharply lower quotations for the metal on the London market, continued lack of demand from consumers, large inventory accumulations by users this spring, increased world mine production, manufacturers' plant closings for summer vacations, and operation of U. S. mines beyond the labor contract expiration date of June 30.

The half-cent rise in the smelter quotation to 29.50c reflected increases in the metal's price on the London Metal Exchange and on the New York Commodity Exchange. The up-

ward trend on both exchanges was attributed to announcement of curtailments in production. Phelps Dodge stated it was cutting its mine output by 7 per cent of its rate in the 1959 first half. Rhodesian Selection Trust said it was curtailing its output in the second half to 90 per cent of the rate in the first half of this year. Contributing to the strength was a sit-down strike at Anaconda's Potrerillos smelter in Chile which could result in the firm's El Salvador mine having to suspend operations.

As prices climbed on the LME and Comex, domestic smelters' scrap copper buying prices also moved upward; on July 16 they were paying for scrap on the basis of 23.75c a pound for No. 2 heavy copper and wire.

Following the drop in the producers' electro quotation, prices for brass and wire mill products were reduced on July 14 and 15 to reflect a copper price of 30.00c. Fabricators at the same time similarly reduced their brass mill scrap buying prices. Earlier, on July 7, brass and bronze ingot selling prices were reduced 1.00c to 2.00c a pound, depending on grade.

Katanga, GIRM Prices Cut

Overseas, the large Belgian producer, Union Minière du Haut Katanga, reduced its Belgian price to 29 francs a kilo (26.30c a pound c.i.f. New York, not including the 1.70c a pound U. S. import duty). The price previous to July 14 had been 30½ francs a kilo, or 27.45c a pound c.i.f. New York.

GIRM, the French agency, reduced its price on July 16 to 296 francs per kilo (26.37c a pound f.a.s. New York) from the 303 francs per kilo (27.00c a pound f.a.s. New York) which had been in effect since July 8.

June Copper Statistics

Deliveries of refined copper to domestic consumers in June rose to the staggering total of 150,993 tons from 135,135 tons in May. Refined stocks at the end of June dipped to 84,798 tons from 86,132 tons in May, while refined output in June was up slightly to 138,403 tons from 135,031 tons in the preceding month.

Foreign copper primary output in June hit an all-time high of 178,239 tons. The output has been running far in excess of foreign consumption

and while the foreign refined stocks showed a decrease of 4,399 tons at the end of June, that drop was also attributed to the accelerated deliveries last month, of 143,916 tons as compared with 131,243 tons in May.

In domestic copper circles the feeling prevailed that unless there is a substantial cut in production by foreign producers, the statistical position of the metal is likely to deteriorate. The cut of 7 per cent by Phelps Dodge, which amounts to about 1,600 tons a month, is not likely to correct the over-supply situation. The domestic stocks of refined copper of about 85,000 tons are anything but large and in some quarters are regarded as being too small for comfort in case there should be a strike. Meanwhile, an official of Kennecott said that his company is not scheduling, at present, any production cuts.

Lead Demand Light

The lead market turned quiet with the start of the strike of the steel industry at midnight, July 14. And there was nothing in the situation that portended an immediate revival in activity. Trade quarters believed a protracted strike in the steel industry would affect other major steel consuming industries which in turn would have its influence on the consumption of lead.

Although the demand for lead was light, the market undertone remained steady with the price holding firm at 12.00c New York and at 11.80c St. Louis.

Zinc Market Firm

Zinc producers took it for granted that the steel strike would halt the consumption of zinc by the galvanizing mills. A deterioration in the statistical position of the metal due to the steel strike is not expected, at this time, to have any weakening influence on the market.

Producers felt confident that the Prime Western zinc quotation of 11.00c a pound, East St. Louis, will hold firm.

The zinc statistics for June, as anticipated, reflected the improvement in the market, with stocks lower, deliveries higher and output little changed. The June figures for all

grades of zinc follow in tons, with the May totals in parentheses: production, 75,544 (77,489); domestic deliveries, 99,858 (85,073); stocks at end of month, 169,386 (196,004). The June domestic deliveries were inflated by abnormal shipments on consignment of approximately 9,000 tons.

Tin Market Slow

The domestic tin market in recent trading has slowed down, as consumers withdrew from the market with the approach of the deadline for the strike in the steel industry. Some quarters believed that if the strike continues for any length of time, tin prices may ease. They also believed, however, that as soon as consumers thought they could pick up some "cheap" tin, prices would firm up.

Spot Straits tin, meanwhile, was quoted at 102.125c a pound in the New York market on July 15, compared with the price of 104.50c (nominal) for June 11, the last quotation in this space. The high for the June 11-July 15 period was 104.875c (nominal) for June 15, while the low was the 102.25c for July 14.

Aluminum Labor Talks

Aluminum-labor negotiations were under way. The United Steelworkers of America said it had made a wage

proposal to Alcoa, Reynolds and Kaiser "identical" with its steel bargaining demand. This means a request for a 15-cent hourly annual pay increase for either one, two or three years. The USW contracts with the producers expire July 31.

Meanwhile, the Business and Defense Services Administration in Washington reported that aluminum demand this year has been growing more rapidly than was expected at the end of 1958, and the 1959 consumption outlook is now estimated at 25-30 per cent better than in 1958, as compared to a somewhat less optimistic year-end estimate. Shipments to consumers in 1959 are expected to top the prior peak set in 1956 by 10 per cent.

Talk continued to be heard that higher primary aluminum prices are in the offering. Prices, meanwhile, were firm, with the 30-pound, 99.5% plus ingot quoted at 26.80c a pound.

Quicksilver Weaker

Spot quicksilver on July 15 was quoted at \$234 to \$236 per flask of 76 pounds, as compared with the last range quoted in this space of \$241 to \$243. Demand for the metal was slow while supplies were described as more than adequate. Trade quarters indi-

cated the slower demand was usual for this time of the year when many consumers shut down for annual vacation periods.

Silver Unchanged

The New York silver price was maintained at 91.375c an ounce, which level was established March 3.

Platinum Steady

Refiners maintained their platinum quotations at \$77 to \$80 an ounce. With dealers quoting \$76 to \$77 an ounce, the market on July 16 was quoted at \$76 to \$80 an ounce.

Titanium Price Cut

Du Pont, effective with shipments August 1, 1959, is cutting its base prices of titanium metal sponge as follows: A-1 grade sponge, from \$1.82 to \$1.60 per pound; A-2, from \$1.70 to \$1.50. The prices apply on minimum quantities of 100 pounds f.o.b. Newport, Delaware.

Tellurium Price Raised

American Smelting and Refining Co. increased its price of commercial grade tellurium 50.00c a pound on July 15 to \$2.50 a pound in quantity lots. The new price, a company official said, reflected increased demand. The last price increase occurred on May 1 when it advanced by 35.00c a pound to \$2 a pound.

NATIONAL BUSINESS PUBLICATIONS

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WASTE TRADE JOURNAL (Weekly) — The leading market authority on scrap and waste materials of all kinds. Read by producers, dealers and consumers all over the world.

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WORLD MARKETS DIRECTORY — International Trade Guide listing over 60,000 importers and exporters of commodities, merchandise and raw materials. Commodity index printed in English, French and Spanish.

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WORLD'S WASTE TRADE DIRECTORY — An International Index of importers and exporters of scrap and waste materials throughout the world, covering scrap iron, metals, rubber, rags, waste paper, textile waste, used bags, etc.

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WIRE SERVICE — A special telegraph and telephone service on market developments and price changes in copper, tin, lead, zinc, aluminum, iron and steel.

WORLD CHEMICAL DIRECTORY — An International Index of importers, exporters and manufacturers of chemicals, drugs, plastics, oils, etc. Commodity Listings in French, Spanish and English. Contains four sections — Commodity Index — Commodity Classifications — Geographical Section — Brand and Trademark Section — all important sources of supply and distribution for international trade.

WORLD TEXTILE DIRECTORY — An international index listing in three languages the importers and exporters of raw cotton, wools, silk, rayon, yarns, fibres, burlap, jute, flax, linen, textile wastes, piece goods, all textile manufacturers, etc.

NATIONAL BUSINESS PRESS

425 West 25th Street, New York 1, N. Y.

Daily Metal Quotations for June, 1959

The following quotations are taken from the Daily Metal Reporter*
(In Cents Per Pound)

	Copper	Tin Straits New York	Lead	Zinc	Alumi- num	Anti- mony	Silver
1	31.50	31.60	31.50	31.375	104.50	104.25	12.00
2	31.50	32.00	31.60	31.50	104.50	104.50	11.80
3	31.50	32.00	31.60	31.50	104.50	104.50	11.80
4	31.50	32.00	31.60	31.50	104.50	104.25	12.00
5	31.50	32.00	31.60	31.50	104.50	104.50	12.00
6	31.50	32.00	31.60	31.50	104.50	104.50	12.00
7	31.50	32.00	31.60	31.50	104.50	104.50	12.00
8	31.50	32.00	31.60	31.50	104.75	104.75	12.00
9	31.50	32.00	31.60	31.50	104.50	104.50	12.00
10	31.50	32.00	31.60	31.50	104.50	104.50	12.00
11	31.50	32.00	31.60	31.50	104.50	104.50	12.00
12	31.50	32.00	31.60	31.50	104.625	104.625	12.00
13	31.50	31.50	31.10	30.25	104.875	104.875	12.00
14	31.50	31.50	31.10	31.50	104.75	104.75	12.00
15	31.50	31.50	31.10	31.50	104.875	104.875	12.00
16	31.50	31.50	31.10	30.00	104.75	104.75	11.80
17	31.50	31.50	31.10	31.50	29.625	104.625	12.00
18	31.50	31.50	31.10	31.50	29.625	104.50	12.00
19	31.50	31.50	31.10	31.50	30.75	104.625	12.00
20	31.50	31.50	31.10	31.50	30.75	104.625	12.00
21	31.50	31.50	31.10	31.50	30.75	104.625	12.00
22	31.50	31.50	31.10	31.50	30.75	103.625	12.00
23	31.50	31.50	31.10	31.50	28.75	103.625	12.00
24	31.50	31.50	31.00	30.85	31.50	28.50	103.375
25	31.50	30.50	30.60	31.50	28.25	103.875	12.00
26	31.50	30.50	30.60	31.50	28.00	103.75	12.00
27	31.50	30.00	30.35	31.50	28.00	103.375	12.00
28	31.50	30.00	30.35	31.50	28.00	103.25	12.00
29	31.50	30.00	30.35	31.50	28.00	103.25	12.00
30	31.50	30.00	30.35	31.50	28.00	103.25	12.00
AV.	31.50	31.477	31.202	31.50	29.898	104.25	104.142
HL.	31.50	32.00	31.60	31.50	31.50	104.875	104.875
LO.	31.50	30.00	29.60	31.50	28.00	103.25	103.25

* When split quotations prevail the daily average price is listed. The highs and lows for the month take into consideration the levels reached at both sides of such ranges.

Copper Brands

Deliverable Against Commodity Exchange, Inc.

Brand or Marks

Brand or Marks	Producer	Grade
B. E. R.	American Smelting & Refining Co. (Baltimore, Md.)	Electrolytic
P. A.	American Smelting & Refining Co. (Maurer, N. J.)	Electrolytic
T	American Smelting & Refining Co. (Tacoma, Wash.)	Electrolytic
B. & M.	Anaconda Copper Mining Co.	Electrolytic
AE	Andes Copper Mining Co.	Electrolytic
BOLIDEN	Bolidens-Gruvaktiebolag	Electrolytic
C. C. R.	Canadian Copper Refiners Ltd. (Montreal)	Electrolytic
C de P Peru	Cerro de Pasco Corporation	Electrolytic
C. C. C.	Chile Copper Company	Electrolytic
F E C	Falconbridge Nickel Mines, Ltd.	Electrolytic
K U E	Kennecott Copper Corp.	Electrolytic
L. M. C.	Lewin Metals Corporation	Electrolytic
M U F	Mufulira Copper Mines, Ltd.	Electrolytic
N A	Norddeutsche Affinerie	Electrolytic
O R C	Ontario Refining Co., Ltd.	Electrolytic
A. L. S.	Phelps Dodge Refining Corp. (For Adolph Lewisohn Selling Corp.)	Electrolytic
L. N. S.	Phelps Dodge Refining Corp.	Electrolytic
P * D	Phelps Dodge Corporation	Electrolytic
N. E. C.	Raritan Copper Works	Electrolytic
R E C	Rhokana Corporation	Electrolytic
B O R	Rudnici Bakra i Topionice	Electrolytic
U M K	Union Miniere du Haut Katanga	Electrolytic
D R W	United States Metals Refining Co.	Electrolytic
AMCO	United States Metals Refining Co.	Electrolytic
OFHC	United States Metals Refining Co.	Electrolytic
W E K	Zinnwerke Wilhelmsburg G.m.b.H.	Electrolytic

† Subsidiary, American Metal Climax, Inc.

Brand or Marks

Brand or Marks	Producer	Grade
C & H	Calumet & Hecla Consolidated Copper Co.	Lake
C. R.	Copper Range Company	Lake
Q. M. CO.	Quincy Mining Company	Lake

Brand or Marks

Brand or Marks	Producer	Grade
B. C. R.	British Copper Refiners, Ltd.	Conductivity
N. H. E.	Nassau Smelting & Refining Co., Inc.	Conductivity
A M CO	United States Metals Refining Company	Conductivity
R H C		

Brand or Marks

Brand or Marks	Producer	Grade
*** (3 Star)	Braden Copper Company	Fire Refined
K C M	Kennecott Copper Corporation	(other than Lake & Fire Refined)
M T D	Messina (Transvaal) Development Co.	High Conductivity
P. D. M.	Phelps Dodge Corporation	High Conductivity
R	United States Metals Refining Company	

Brand or Marks

Brand or Marks	Producer	Grade

Brand or Marks

Brand or Marks	Producer	Grade

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United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 30, 1957, Under Geneva Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE — The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

Copper ore and concentrates, usable as flux, etc.	
copper content	1.70c lb.
Copper ore and concentrates, product of Cuba,	
copper content	free
Copper ore and concentrates, product of	
Philippines, copper content	0.17c lb.
Copper ore and concentrates, copper content	1.70c lb.
Regulus, black, or coarse copper, and cement	
copper, copper content	1.70c lb.
Unrefined black, blister, and converter copper in	
pigs or converter bars, copper content	1.70c lb.
Refined copper in ingots, plates or bars, copper	
content	1.70c lb.
Copper rolls, rods or sheets	1 1/4c lb.
Copper seamless tubes and tubing	(plus 1.70c lb. $\dagger\dagger$)
Copper plain wire	1 2 1/4c %
Copper brazed tubes	(plus 1.70c lb. $\dagger\dagger$)
Old and scrap copper, fit only for remanufacture:	
and scale and clippings, copper content	1.70c lb.

$\dagger\dagger$ Copper content.

BRASS

Brass rods, sheets, plates, bars, strips, Muntz or	
yellow metal sheets, sheathing, bolts, piston	
rods, shafting and bronze rods, tubes and	
sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12 1/2 %

LEAD

NOTE — Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended February 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f.	
lead content	3/4c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheets, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead,	
lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1 1/4c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

ZINC

NOTE — Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended February 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing	
not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s.	
not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for	
remanufacture	3/4c lb.
Dross and skimmings	3/4c lb.
Zinc in blocks, pigs or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base	
metal, or solutions	1 1/4c lb.

Zinc dust	7/10c lb
Zinc die-casting alloys	12 1/2 %
Zinc oxide and leaded zinc oxides containing	
not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except	
alloys elsewhere provided for	1.25c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles,	
squares, etc.†	2.50c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb.
Antimony needle or liquitated	1/4c lb.
Antimony oxide	1c lb.
Antimony sulphides	1/2c lb. & 12 1/2 %
Arsenic, metallic†	2.50c lb.
Arsenious acid or white arsenic	free
Bauxite, crude*	free
Bauxite, refined**	1/4c lb.
Bismuth	1 1/8 %
Bismuth salts and compounds	35 %
Beryllium metal†	21 %
Beryllium ore	free
Cadmium	3 3/4c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Chrome or chromium metal†	10 1/2 %
Cobalt metal	free
Cobalt ore and concentrates, cobalt content	free
Magnesium, metallic†	50 %
Magnesium powder, sheets, wire†	17c lb. & 8 1/2 %
Magnesium alloys	20c lb. & 10 %
Magnesium scrap	free
Manganese ores, containing over 10% manganese,	
manganese content	1/4c lb. except Cuba, free
Molybdenum ore or concentrates, molybdenum	
content	30c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f.,	
in pigs, ingots, shot, cubes, grains, cathodes,	
or similar forms	1 1/4c lb.
Nickel, bars, rods, plates, sheets, castings, strips,	
wire or electrodes	12 1/2 %
Nickel scrap	free
Nickel tubes, tubing	6 1/4 %
(if cold rolled, drawn or worked — 2 1/2 % extra)	
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not	
less than 1/8 in. thick, oz. troy	free
Platinum, ores, platinum content, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12 1/2 %
Tin ore, cassiterite, and black oxide of tin,	
tin content	free
Tin in bars, blocks, pigs, grain, granulated, and	
scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

*Crude bauxite import duty suspended through July 15, 1960. **Under Public Law 25 alumina imported for use in aluminum production is free for entries from July 17, 1956 through July 15, 1960. †Tariff reduced 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

	Crude Production		Refined Production	Deliveries to Refined Stock		Stock Increases or Decreases		
	Primary	Secondary		Customers	End of Period	Blister	Refined	Total
1957								
Total	2,897,719	123,270	3,035,588	2,853,307	458,340	-14,599	+103,920	+89,321
1958								
June	214,283	11,414	228,387	240,825	476,823	-2,540	-21,963	-24,233
July	216,315	9,516	229,578	220,801	475,164	-3,747	-1,659	-5,406
August	224,673	9,474	217,914	247,116	436,476	+16,233	-38,688	-22,455
September	202,719	7,960	204,006	254,667	374,180	+6,673	-60,948	-54,275
October	204,938	20,613	192,199	292,630	269,654	+33,352	+105,126	-71,774
November	227,916	17,755	230,109	261,097	236,774	+15,562	-32,880	-17,318
December	253,512	8,883	282,191	260,841	258,874	-19,796	+22,100	+2,304
Total	2,707,926	138,696	2,805,622	2,916,588	258,874	+41,000	-199,466	-158,466
1959								
January	257,682	12,377	270,995	248,574	284,545	-	+22,001	+21,065
February	244,405	12,737	264,018	243,741	304,303	-	+19,578	+12,882
March	270,248	17,019	285,425	270,768	319,241	+	+14,938	+16,780
April	265,937	15,653	278,959	270,262	329,871	+	+10,630	+13,261
May	279,629	11,695	283,024	266,378	350,343	+	+20,472	+28,772
June	277,158	12,285	284,278	294,909	344,610	+	5,165	-568
In U. S. A.								
1957								
Total	1,116,380	112,060	1,816,964	1,277,946	181,024	.....	+60,379	.....
1958								
May	80,628	10,488	115,978	78,631	253,463	.....	+2,364	.....
June	71,092	10,980	107,918	100,796	244,450	.....	-8,013	.....
July	64,444	8,858	110,130	77,523	242,781	.....	-2,669	.....
August	67,917	8,999	100,640	86,982	215,560	.....	-27,221	.....
September	79,541	7,259	107,971	101,971	178,222	.....	-37,338	.....
October	92,214	19,865	113,288	120,793	128,490	.....	-49,732	.....
November	96,369	16,755	128,048	131,188	93,596	.....	-34,894	.....
December	97,641	7,911	146,978	116,310	80,722	.....	-100,302	.....
Total	1,008,170	131,294	1,446,540	1,179,416	80,722	.....	-12,874	.....
1959								
January	95,542	11,284	137,361	114,425	80,780	.....	+58	.....
February	88,432	11,425	142,235	120,134	85,523	.....	+4,743	.....
March	101,410	16,120	140,928	124,220	85,952	.....	-2,751	.....
April	98,376	14,287	137,490	135,233	74,323	.....	-8,629	.....
May	104,236	9,933	135,031	135,135	86,132	.....	+11,809	.....
June	98,919	11,290	138,403	150,993	84,798	.....	-1,334	.....
Outside U. S. A.*								
1957								
Total	1,783,119	11,210	1,418,624	1,575,361	277,316	.....	+43,541	.....
1958								
May	137,759	702	109,793	134,302	245,053	.....	-5,014	.....
June	143,191	584	120,469	140,029	231,373	.....	-13,680	.....
July	151,871	658	119,448	143,278	232,383	.....	+1,010	.....
August	156,756	475	117,274	160,134	220,916	.....	-11,467	.....
September	123,178	701	96,035	153,633	196,558	.....	-23,610	.....
October	112,724	748	78,911	171,827	141,184	.....	-55,394	.....
November	131,334	980	102,061	129,909	143,178	.....	+2,014	.....
December	155,871	972	135,213	144,531	178,152	.....	+34,974	.....
Total	1,699,756	7,402	1,359,082	1,737,172	178,152	.....	-99,164	.....
1959								
January	162,140	1,093	133,634	134,149	203,765	.....	+21,943	.....
February	155,973	1,312	121,783	123,607	218,780	.....	+15,015	.....
March	168,838	899	144,497	146,548	236,232	.....	+17,502	.....
April	161,561	1,366	141,469	135,029	255,548	.....	+19,259	.....
May	175,293	1,762	147,993	131,243	264,211	.....	+8,663	.....
June	178,239	995	145,875	143,916	259,812	.....	-4,399	.....

* Excluding Russia, Yugoslavia, Norway, Sweden, Japan and Australia.

Electrolytic Copper Producers' Price, Del. Valley Monthly Average Prices (Cents Per Pound)

1956	1957	1958	1959
Jan. 43.00	36.00	25.69	29.00
Feb. 44.03	33.318	25.00	29.972
Mar. 46.00	32.00	25.00	31.14
Apr. 46.00	32.00	25.00	31.50
May 46.00	32.00	25.00	31.50
June 46.00	30.955	25.36	31.50
July 41.56	29.25	26.125	....
Aug. 40.00	28.639	26.50	....
Sept. 40.00	27.031	26.50	....
Oct. 39.308	27.00	27.548	....
Nov. 36.00	27.00	29.00	....
Dec. 36.00	27.00	29.00	....
Aver. 41.992	30.183	26.31	....

Electrolytic Copper Custom Smelters' Price, Del. Valley Monthly Average Prices (Cents Per Pound)

1956	1957	1958	1959
Jan. 50.22	34.87	24.577	29.429
Feb. 52.07	32.273	23.557	30.361
Mar. 53.11	30.952	23.326	33.21
Apr. 48.88	31.24	23.66	32.84
May 44.221	30.163	23.865	32.00
June 40.00	29.60	25.52	31.477
July 38.14	28.39	29.231	....
Aug. 39.32	27.862	26.52	....
Sept. 39.00	25.948	26.355	....
Oct. 37.192	25.722	28.577	....
Nov. 35.95	25.435	29.829	....
Dec. 35.45	25.26	28.846	....
Aver. 42.797	28.93	25.905	....

Lake Copper Producers' Price Delivered Monthly Average Prices (Cents Per Pound)

1956	1957	1958	1959
Jan. 43.00	36.00	25.69	29.00
Feb. 43.783	33.182	25.00	30.00
Mar. 46.00	32.00	25.00	31.14
Apr. 46.00	32.00	25.00	31.50
May 46.00	32.00	25.00	31.50
June 46.00	30.955	25.00	31.50
July 41.68	29.25	25.75	....
Aug. 40.00	28.611	26.50	....
Sept. 40.00	27.00	26.50	....
Oct. 39.321	27.00	27.577	....
Nov. 36.00	27.00	29.00	....
Dec. 36.00	27.00	29.00	....
Aver. 41.975	30.162	26.251	....

Fabricators' Copper Statistics

(In tons of 2,000 pounds)

Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consumed by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1953					
Total	380,881	25,022	309,664	170,917	1,375,869
1954					
Total	360,526	58,125	304,619	136,581	1,231,840
1955					
Total	.....	.....	.....	1,418,241	.....
1956					
Oct.	440,706	112,893	336,856	198,517	119,410
Nov.	435,216	110,792	335,829	178,814	119,441
Dec.	437,187	117,601	336,217	183,834	99,223
Total	.....	.....	.....	1,416,378	.....
1957					
Jan.	435,635	107,231	335,944	178,326	119,517
Feb.	422,266	110,174	334,542	178,913	114,298
Mar.	429,410	104,551	338,454	164,623	106,170
Apr.	429,708	98,638	335,921	164,410	117,041
May	434,852	92,943	336,697	170,476	115,355
June	426,905	82,919	340,743	153,042	110,527
July	432,918	85,728	341,684	144,410	77,991
Aug.	429,627	82,768	344,315	144,375	110,323
Sept.	425,168	80,436	344,530	144,538	106,927
Oct.	420,130	80,774	341,869	138,420	119,161
Nov.	428,520	68,249	345,832	128,719	98,725
Dec.	430,171	75,627	347,465	138,631	83,067
Total	.....	.....	.....	1,416,378	.....
1958					
Jan.	445,514	57,917	348,426	123,756	94,642
Feb.	452,673	52,342	351,035	128,330	86,625
Mar.	448,125	71,693	346,875	141,387	83,694
Apr.	450,442	76,602	347,607	145,623	79,613
May	441,001	78,194	346,404	138,190	88,447
June	433,526	72,383	330,301	145,162	109,011
July	431,796	77,362	326,263	153,529	79,353
Aug.	421,931	78,194	323,667	150,436	96,717
Sept.	416,887	71,025	319,281	145,390	105,474
Oct.	399,113	91,019	315,929	156,692	138,017
Nov.	419,914	88,580	328,238	157,799	110,487
Dec.	447,123	90,401	326,438	177,869	92,573
Total	.....	.....	.....	1,165,364	.....
1959					
Jan.	457,387	101,182	337,761	172,698	108,556
Feb.	459,046	123,321	390,522	183,113	116,565
Mar.	449,441	130,785	334,904	211,547	133,259
Apr.	463,582	125,250	337,282	204,618	120,680
May	474,657	133,694	338,835	210,424	123,510

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	15,763	6,640	4,528	6,486	9,859	11,047	14,322	17,506	16,924	14,511
Feb.	12,500	5,153	3,633	10,337	8,490	15,198	14,497	11,145	9,518	14,712
Mar.	13,538	7,912	5,243	19,991	9,738	12,198	15,921	13,934	11,783	14,522
Apr.	12,304	8,553	6,214	16,583	9,004	13,162	17,233	14,288	15,279	17,525
May	8,749	8,458	8,033	10,857	8,687	15,133	20,805	12,397	13,989	13,960
June	20,523	8,628	4,425	10,545	13,309	14,765	14,758	11,949	9,945	15,065
July	10,040	6,642	5,188	9,063	10,260	0,988	12,639	8,926	12,185	...
Aug.	10,452	6,113	5,003	7,137	10,100	12,197	12,510	11,645	11,896	...
Sept.	4,903	3,561	4,667	9,042	10,641	15,037	9,518	9,756	9,268	...
Oct.	9,459	3,336	4,602	10,065	11,662	12,897	15,570	13,151	23,088	...
Nov.	9,237	3,179	4,724	7,815	10,879	9,865	11,369	11,146	16,425	...
Dec.	7,178	4,538	6,208	11,476	14,876	13,180	14,613	11,237	10,796	...
Total	142,067	71,812	62,470	129,798	127,449	154,714	173,748	147,080	164,196	...

* As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(NET TONS)

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	19,466	18,874	28,416	28,315	23,423	20,661	25,201	27,736	25,681	20,468	22,046
Feb.	15,026	18,487	27,168	24,211	25,429	19,929	25,349	24,949	20,769	17,413	23,746
Mar.	14,550	22,494	31,997	23,890	28,256	23,658	29,713	28,310	21,948	18,825	26,109
Apr.	10,695	22,118	30,473	22,547	25,044	24,746	27,641	25,809	23,507	18,009	26,115
May	11,114	23,643	33,267	21,740	21,660	22,269	23,708	23,437	22,097	17,191	23,967
June	9,696	25,093	33,817	21,274	20,818	22,348	23,141	18,842	18,888	17,582	...
July	10,220	21,609	32,016	18,947	19,321	17,074	14,513	17,364	16,695	16,658	...
Aug.	14,194	29,689	25,286	21,807	20,156	21,684	27,013	23,812	19,654	17,882	...
Sept.	16,208	28,811	22,285	22,770	21,463	22,464	26,349	20,529	19,670	20,540	...
Oct.	18,026	32,240	23,124	25,811	22,280	24,080	25,228	23,045	22,800	23,225	...
Nov.	18,488	31,748	25,544	23,441	21,806	23,061	25,102	21,818	19,767	20,758	...
Dec.	17,950	28,575	20,987	22,983	20,541	21,274	24,448	18,016	16,875	18,676	...
Total	175,643	303,563	332,378	277,768	271,251	263,233	204,406	274,074	24,297	227,607	...
Aver.	14,637	25,297	27,615	23,145	22,694	21,936	24,867	22,841	26,681	18,133	...

Mine Production of Copper in United States

	(U. S. Bureau of Mines) (In short tons)		
	Eastern	Missouri	Western
1956	77,681	2,130	1,018,496
Ttl.	77,681	2,130	1,010,307
1957	7,063	70	80,848
Nov.	7,063	70	87,981
Dec.	6,962	67	81,080
Ttl.	7,063	70	87,981
1958	7,517	123	79,594
Jan.	7,517	123	87,234
Feb.	7,035	161	84,107
Mar.	6,522	152	71,717
May	5,801	155	62,296
June	5,801	155	68,252
July	4,188	132	56,672
Aug.	5,570	127	61,342
Sept.	5,312	114	77,561
Oct.	7,002	60	85,075
Nov.	6,617	60	87,379
Dec.	6,614	70	88,070
Ttl.	76,849	1,250	980,304

Average Custom Smelters' Scrap Buying Prices

	(Cents per pound for carload lots del. consumers' works)			
	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Re-finery Brass
1956	19.21	17.71	15.46	16.92
Mar.	19.60	18.10	15.85	17.56
May	20.02	18.52	16.27	17.894
June	21.93	20.43	18.18	19.76
July	22.52	21.02	18.77	20.26
Aug.	22.62	21.12	18.87	20.12
Sept.	22.37	20.87	18.88	19.87
Oct.	24.80	23.30	21.05	22.30
Nov.	25.597	24.097	21.847	23.097
Dec.	24.356	22.856	20.606	21.856
Aver.	21.788	20.282	18.035	18.047
1959	25.29	23.79	21.54	22.79
Feb.	26.42	24.92	22.67	24.11
Mar.	28.79	27.29	25.04	26.79
Apr.	28.04	26.50	24.29	26.04
May	27.81	26.31	24.06	25.81
June	26.80	25.30	23.05	24.80

*Or dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Copper Buying Prices

	(Average Prices) (Cents per pound del. refinery for 60,000 lbs. of each grade)			
	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Comp. Scrap	Heavy Yellow Brass
1956	19.60	18.10	17.75	12.35
May	19.923	18.423	18.038	12.769
June	21.93	20.43	19.02	13.43
July	22.52	21.02	19.24	13.53
Aug.	22.62	21.12	19.11	13.80
Sept.	22.37	20.87	18.88	12.90
Oct.	24.80	23.30	20.51	14.938
Nov.	25.597	24.097	20.182	14.125
Dec.	24.356	22.856	19.038	13.038
Aver.	21.777	20.277	18.653	13.024
1959	25.29	23.79	19.70	13.982
Feb.	26.42	24.92	21.08	15.08
Mar.	28.79	27.29	22.85	16.85
Apr.	28.04	26.54	21.69	15.70
May	27.81	26.31	21.17	15.17
June	26.80	25.30	21.159	15.307

Lead Statistics Reported by American Bureau of Metal Statistics

Lead Refineries in U. S. A. and Outside U. S. A.

(Recoverable Lead Content in Tons of 2,000 Pounds)

Combined U. S. A. and Outside U. S. A.

REFINED PRODUCTION

REFINED PRODUCTION				DELIVERIES			STOCKS		
Antimonial				Antimonial			Antimonial		
	Pig	Lead Content	Total	Pig	Lead Content	Total	Pig	Lead Content	Total
1958									
Aug.	103,701	8,973	112,674	102,898	9,903	112,801	284,818	17,260	302,078
Sept.	116,283	8,806	125,089	121,929	7,986	129,915	279,172	18,080	297,252
Oct.	121,934	10,656	132,590	139,698	9,408	149,106	262,510	19,328	281,838
Nov.	120,951	8,971	129,922	112,495	9,381	121,876	273,033	18,918	291,951
Dec.	129,461	10,898	140,359	90,498	8,583	99,081	313,232	21,233	334,465
Total	1,485,282	106,383	1,591,665	1,307,390	102,697	1,410,087	.....	.....	.....
1959									
Jan.	129,604	9,755	139,359	114,038	10,014	124,052	328,719	20,974	349,693
Feb.	114,528	8,944	123,472	90,915	9,094	100,009	347,455	20,824	368,279
Mar.	123,549	8,747	132,296	118,050	9,403	127,453	362,493	20,168	382,661
Apr.	127,995	10,398	138,393	146,409	10,345	156,754	334,178	20,221	354,399
May	139,046	10,216	140,262	144,988	8,566	153,554	310,042	21,871	331,913

U. S. A.

U. S. A.				DELIVERIES			STOCKS		
Antimonial				Antimonial			Antimonial		
	Pig	Lead Content	Total	Pig	Lead Content	Total	Pig	Lead Content	Total
1958									
Aug.	34,275	4,890	39,165	50,145	4,956	55,101	201,759	11,150	212,909
Sept.	38,508	4,525	43,033	65,301	4,516	69,817	215,389	11,991	227,380
Oct.	40,225	5,153	45,378	70,580	4,455	75,035	207,335	12,728	220,063
Nov.	36,572	3,621	40,193	44,834	4,181	49,015	217,728	12,352	230,080
Dec.	39,504	4,307	43,811	31,869	3,737	35,606	239,049	13,417	252,466
Total	473,208	46,985	520,193	589,528	49,893	639,421	.....	.....	.....
1959									
Jan.	40,110	3,365	43,475	48,311	4,492	52,803	244,870	12,426	257,296
Feb.	35,084	4,145	39,229	40,881	4,073	44,954	254,229	12,961	267,190
Mar.	35,140	3,868	39,008	49,742	4,279	54,021	248,166	12,744	260,910
Apr.	35,072	5,167	40,233	60,312	5,072	65,384	234,187	13,578	247,765
May	34,483	4,359	38,842	78,398	4,598	82,996	209,558	13,950	223,508

Outside U. S. A.

Outside U. S. A.				DELIVERIES			STOCKS		
Antimonial				Antimonial			Antimonial		
	Pig	Lead Content	Total	Pig	Lead Content	Total	Pig	Lead Content	Total
1958									
Aug.	69,426	4,083	73,509	52,753	4,947	57,700	83,059	6,110	89,169
Sept.	77,775	4,281	82,056	56,628	3,470	60,098	63,783	6,089	69,872
Oct.	81,709	5,503	87,212	69,118	4,953	74,071	55,175	6,600	61,775
Nov.	84,379	5,350	89,729	67,661	5,200	72,861	55,305	6,566	61,871
Dec.	89,957	6,591	96,548	58,629	4,846	63,475	74,183	7,816	81,999
Total	1,012,074	59,398	1,071,472	717,862	52,804	710,666	.....	.....	.....
1959									
Jan.	89,494	6,390	95,884	65,727	5,522	71,249	83,849	8,548	92,397
Feb.	79,444	4,799	84,243	50,034	5,021	55,055	93,226	7,863	101,089
Mar.	88,409	4,879	93,288	68,308	5,124	73,432	114,327	7,424	121,751
Apr.	92,923	5,231	98,154	86,097	5,273	91,370	99,991	6,643	106,634
May	95,563	5,857	101,420	66,590	3,968	70,558	100,484	7,921	108,405

Summary of Lead Statistics for United States

Recoverable Lead Content in Tons of 2,000 Pounds	Raw Material at Smelter	Stocks (end of period)			Smelter Receipts				
		Base Bullion	At Refinery and Process	Refined Pig and Antimonial	Total	U. S. A.	Origin-Outside U. S. A.	Scrap	Total
1958									
June	77,858	4,420	28,254	206,319	316,851	30,230	14,022	1,315	45,567
July	81,103	4,848	30,065	211,976	327,992	23,440	19,665	1,629	44,734
August	75,116	4,794	33,863	212,909	326,682	23,898	13,145	1,269	38,312
September	70,290	4,948	32,606	227,380	335,224	21,775	14,937	1,673	38,385
October	58,863	4,773	29,833	220,063	313,532	19,630	9,205	3,699	32,534
November	60,222	3,573	30,208	230,080	324,083	23,603	15,932	3,869	43,404
December	68,197	4,489	28,955	252,466	354,107	25,544	18,921	4,090	43,555
Total	.....	.....	.....	.....	297,687	191,415	29,080	518,182	
1959									
January	69,015	4,243	31,577	257,296	362,131	24,931	19,185	3,167	47,283
February	58,921	2,919	35,062	267,190	364,092	22,934	8,435	1,772	33,141
March	65,478	4,283	33,815	260,910	364,486	22,258	21,368	1,426	45,052
April	61,779	4,424	31,596	247,765	345,564	22,868	11,344	1,214	35,426
May	52,115	3,370	32,693	223,508	311,686	22,072	5,330	2,008	27,140
Smelter Production									
1958									
June	43,662	40,795	3,600	44,395	45,640	4,409	50,049		
July	40,328	36,052	2,681	38,733	47,381	5,263	52,644		
August	41,099	34,275	4,890	39,165	50,145	4,956	55,101		
September	42,473	38,508	4,525	43,033	65,301	4,516	69,817		
October	41,975	40,225	5,153	45,378	70,580	4,455	75,035		
November	41,365	36,572	3,621	40,193	44,834	4,181	49,015		
December	39,972	39,504	4,307	43,811	31,869	3,737	35,806		
Total	512,323	473,208	46,985	520,193	589,528	49,893	639,421		
1959									
January	45,938	40,110	3,365	43,475	48,311	4,492	52,803		
February	40,655	35,084	4,145	39,229	40,881	4,073	44,954		
March	38,138	35,140	3,868	39,008	49,742	4,279	54,021		
April	38,614	35,072	5,167	40,239	60,312	5,072	65,384		
May	38,722	34,483	4,359	38,842	78,398	4,598	82,996		

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1954	81,152	551,618	632,770	92,719	475,551
1955	28,855	547,153	639,872	31,089	531,339
1956					
Total	...	613,293	644,382	...	529,484
1957					
September	60,633	50,436	111,069	54,682	51,859
October	54,682	52,041	106,723	59,041	40,447
November	59,041	48,771	107,812	70,874	32,193
December	70,874	50,500	121,374	91,598	24,108
Total	...	604,353	645,534	...	463,060
1958					
January	91,598	47,665	139,263	101,206	33,422
February	101,206	47,133	148,339	119,522	23,832
March	119,522	43,441	162,963	128,754	28,885
April	128,754	40,984	169,738	143,136	22,172
May	143,136	47,487	190,623	155,121	30,021
June	155,121	44,636	199,757	163,504	32,078
July	163,504	38,827	202,331	164,860	31,948
August	164,860	39,520	204,380	169,302	34,254
September	169,302	43,269	212,571	170,666	41,657
October	170,666	45,467	216,133	169,435	46,647
November	169,435	40,485	209,920	179,321	30,591
December	179,321	44,042	223,363	198,538	24,852
Total	...	522,956	614,554	...	380,359
1959					
January	198,508	43,652	242,160	208,874	33,035
February	208,874	39,498	248,372	214,946	30,685
March	214,946	39,238	254,184	210,524	40,980
April	210,524	40,606	251,130	197,823	52,469
May	197,823	39,101	236,924	171,577	65,207

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics)

(In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Bait'y	Brass Making	Sun-dries	Jobbers	Unclassified
1955								
Total	72,418	27,599	2,622	88,461	3,960	52,994	13,034	270,251
1956								
Dec.	6,440	1,449	85	5,832	160	7,258	394	22,573
Total	80,360	24,501	1,435	70,614	3,158	56,851	13,213	274,716
1957								
Jan.	5,297	2,800	200	6,886	671	4,002	1,191	19,502
Feb.	5,103	1,450	350	6,549	508	4,820	625	18,112
Mar.	5,956	752	...	6,479	686	4,614	1,064	18,674
April	6,731	2,250	...	6,242	909	2,958	1,040	17,453
May	6,976	2,200	120	4,705	270	3,871	634	16,558
June	3,726	2,250	75	3,762	666	5,071	1,087	20,620
July	5,249	1,650	105	5,332	566	5,310	1,110	19,260
Aug.	5,406	2,250	220	6,165	650	6,246	1,403	27,066
Sept.	4,880	2,700	295	6,722	850	5,782	891	29,739
Oct.	3,671	3,300	205	5,973	881	4,203	847	21,367
Nov.	2,950	2,500	85	3,126	493	3,800	706	18,533
Dec.	2,499	1,350	36	2,820	270	2,607	529	13,997
Total	58,444	25,452	1,691	64,761	7,420	53,284	11,127	240,881
1958								
Jan.	2,938	550	70	4,775	521	5,173	801	18,594
Feb.	2,899	1,750	70	5,124	90	1,643	888	11,368
Mar.	3,133	1,200	35	4,711	681	3,149	908	15,068
April	3,207	900	70	3,138	580	2,831	533	10,913
May	3,216	1,850	35	4,671	866	3,071	1,027	15,285
June	3,463	1,950	35	2,767	480	4,217	1,716	17,450
July	3,169	1,250	275	3,936	515	4,157	1,052	17,594
Aug.	3,481	2,415	70	4,992	400	6,399	100	16,397
Sept.	4,132	2,290	320	5,775	848	6,771	1,747	19,774
Oct.	3,243	2,450	...	4,548	285	6,210	1,641	28,270
Nov.	3,690	2,150	50	6,527	360	4,887	822	12,105
Dec.	2,267	2,100	50	6,216	215	2,578	652	10,774
Total	38,838	20,855	1,080	57,180	5,841	51,086	11,882	193,592
1959								
Jan.	2,284	2,100	100	5,594	161	3,545	727	18,524
Feb.	2,988	1,225	50	5,254	735	2,706	931	16,796
Mar.	3,156	1,850	105	5,905	378	6,006	2,185	21,395
April	3,686	2,150	35	7,410	691	5,356	1,966	31,355
May	4,054	2,900	35	6,870	475	7,990	2,843	40,040

Lead Prices at New York

(Common Grade)

Monthly Average Prices

	1956	1957	1958	1959
Jan.	16.16	16.00	13.00	12.619
Feb.	16.00	16.00	13.00	11.583
Mar.	16.00	16.00	13.00	11.42
Apr.	16.00	16.00	12.00	11.20
May	16.00	15.385	11.712	11.905
June	16.00	14.32	11.24	12.00
July	16.00	14.00	11.00	...
Aug.	16.00	14.00	10.85	...
Sept.	16.00	14.00	10.89	...
Oct.	16.00	13.704	12.673	...
Nov.	16.00	13.50	13.00	...
Dec.	16.00	13.00	13.00	...
Aver.	16.013	14.66	12.114	...

Lead Sheet Prices

(To Jobbers, Full Sheets)

Monthly Average Prices

	1956	1957	1958	1959
Jan.	21.66	21.50	18.50	18.119
Feb.	21.50	21.50	18.50	17.083
Mar.	21.50	21.50	18.50	16.92
Apr.	21.50	21.50	17.50	16.70
May	21.50	20.885	17.212	17.405
June	21.50	19.82	16.74	17.50
July	21.50	19.82	16.50	...
Aug.	21.50	19.50	16.35	...
Sept.	21.50	19.50	16.39	...
Oct.	21.50	19.204	18.173	...
Nov.	21.50	19.00	18.50	...
Dec.	21.50	18.50	18.50	...

Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers:

(In thousands of units)

	1956	1957	1958	1959
Jan.	2,058	2,638	2,004	2,672
Feb.	1,340	1,961	1,803	1,791
Mar.	1,348	1,254	1,577	1,376
Apr.	1,368	1,178	1,242	1,439
May	1,761	1,605	1,454	1,607
June	1,807	1,878	1,773	...
July	2,178	2,469	2,101	...
Aug.	2,571	2,856	2,333	...
Sept.	2,711	2,688	2,704	...
Oct.	3,015	3,042	2,976	...
Nov.	2,592	2,359	2,262	...
Dec.	2,265	2,015	3,036	...
Total	25,014	25,943	25,265	...

METALS, JULY, 1959

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	In ore and matte and in process at smelters	—In base bullion (lead content)—					Total Stocks
	smelters & refineries	At refineries	In transit to refineries	In process at refineries	Refined pig lead	Anti- monial lead	
1957							
Apr. 1..	82,461	14,598	3,593	25,401	36,390	9,794	172,237
May 1..	81,061	17,035	2,705	20,890	48,053	9,391	179,135
June 1..	81,364	11,585	3,071	21,002	48,286	9,799	175,107
July 1..	82,730	12,036	3,560	22,380	55,358	9,503	185,567
Aug. 1..	97,111	11,479	2,532	22,917	59,348	8,661	202,048
Sept. 1..	84,205	13,029	2,667	22,439	51,080	9,553	182,973
Oct. 1..	80,662	11,905	3,175	20,351	44,467	10,215	170,775
Nov. 1..	76,230	14,220	2,538	18,695	47,460	11,581	170,724
Dec. 1..	65,341	11,646	3,547	21,867	59,755	11,119	173,275
1958							
Jan. 1..	79,362	11,019	2,779	23,154	79,741	11,857	207,912
Feb. 1..	79,738	11,510	3,678	24,535	88,517	12,689	220,667
Mar. 1..	79,588	9,546	3,670	22,834	107,213	12,309	235,250
Apr. 1..	83,185	10,692	2,187	21,766	116,610	12,144	246,584
May 1..	86,053	11,838	2,138	20,524	130,668	12,468	263,689
June 1..	79,482	11,059	2,010	20,188	141,967	13,154	267,860
July 1..	80,060	9,012	1,570	22,092	150,648	12,856	276,238
Aug. 1..	83,347	12,438	860	21,615	154,378	10,482	283,379
Sept. 1..	77,416	14,767	1,176	20,444	158,413	10,889	283,105
Oct. 1..	72,724	14,797	2,223	18,125	159,662	11,004	278,535
Nov. 1..	61,819	11,492	1,086	19,041	157,385	12,050	262,873
Dec. 1..	62,960	11,072	1,565	20,941	167,493	11,828	275,859
1959							
Jan. 1..	72,378	10,917	1,767	19,746	185,913	12,595	303,316
Feb. 1..	72,832	10,565	1,889	21,317	197,085	11,789	315,477
Mar. 1..	62,383	11,707	1,447	21,479	202,835	12,111	311,962
Apr. 1..	68,433	14,352	350	20,575	198,459	12,065	314,234
May 1..	64,538	12,373	624	20,507	184,468	13,355	295,865
June 1..	55,223	12,239	766	20,391	157,981	13,596	260,196

Receipts of Lead in Ore and Scrap

By U. S. Smelters (a)

(American Bureau of Metal Statistics)

(In tons of 2,000 lbs.)

	Receipts of lead in ore			Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
	United States	Foreign	Total		
1953 Total	351,183	155,788	506,971	42,994	549,965
1954 Total	336,291	158,081	494,372	49,864	544,236
1955 Total	341,595	172,966	514,561	42,996	557,557
1956					
Total	368,499	192,318	560,817	55,925	616,792
1957					
April	31,343	13,042	44,385	2,848	47,233
May	32,138	12,324	44,462	3,431	47,893
June	29,896	19,592	49,488	2,272	51,760
July	29,585	17,936	47,521	2,893	50,414
August	29,225	18,774	47,999	3,190	51,189
September	26,479	13,757	40,236	4,375	44,611
October	29,342	13,782	43,124	4,386	47,510
November	25,809	17,251	43,060	3,258	46,318
December	27,105	26,610	53,715	3,791	57,506
Total	356,409	206,901	563,310	42,537	605,847
1958					
January	25,537	22,097	47,634	3,507	51,141
February	23,789	16,400	40,189	2,184	42,373
March	21,735	20,038	41,773	3,154	44,927
April	25,104	15,821	40,925	1,913	42,838
May	27,427	10,228	37,655	1,867	39,522
June	28,577	13,811	42,388	1,366	43,754
July	22,289	19,692	41,891	1,615	43,596
August	22,984	13,043	36,027	1,252	37,279
September	20,654	14,576	35,230	1,765	36,995
October	18,678	9,093	27,771	3,577	31,348
November	24,024	14,541	38,565	3,933	42,498
December	24,366	18,804	43,170	3,982	47,152
Total	285,164	188,144	473,308	30,115	503,423
1959					
January	24,304	19,449	43,753	3,138	46,891
February	22,253	8,660	30,913	1,747	32,660
March	21,897	21,012	42,909	1,328	44,237
April	22,339	10,998	33,337	1,196	34,533
May	21,645	5,202	26,847	1,930	28,777

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1951	Apr. 1..	13.75
Oct. 2..	**19.00	Apr. 12.. 14.00
1952		June 2.. 14.25
Apr. 29..	18.00	June 15.. 14.00
May 2..	17.00	Aug. 25.. 14.25
May 12..	15.00	Sept. 7.. 14.50
June 23..	15.50	Sept. 15.. 14.75
June 24..	16.00	Oct. 4.. 14.875
Oct. 7..	15.00	Oct. 5.. 15.00
Oct. 14..	14.00	1955
Oct. 22..	13.50	Sept. 23.. 15.00
Nov. 3..	14.00	15.50
Nov. 10..	14.25	Sept. 26.. 15.50
Nov. 11..	14.50	Dec. 29.. 16.00
Nov. 20..	14.25	1956
Nov. 24..	14.00	Jan. 4.. 16.50
Dec. 22..	14.25	Jan. 13.. 16.00
Dec. 29..	14.50	1957
Dec. 31..	14.75	May 9.. 15.50
1953		May 16.. 15.00
Jan. 7..	14.50	June 11.. 14.00
Jan. 12..	14.00	Oct. 14.. 13.50
Feb. 2..	13.50	Dec. 2.. 13.00
Mar. 4..	13.50	1958
Mar. 10..	13.50	Apr. 1.. 12.00
Apr. 7..	13.00	May 14.. 11.50
Apr. 16..	12.50	June 3.. 11.00
Apr. 21..	12.00	June 18.. 11.50
Apr. 29..	12.50	July 1.. 11.00
May 18..	12.75	Aug. 13.. 10.75
May 19..	13.00	Sept. 17.. 11.00
May 26..	13.15	Sept. 30.. 11.50
June 11..	13.50	Oct. 2.. 12.00
July 20..	13.75	Oct. 8.. 12.50
July 23..	14.00	Oct. 14.. 13.00
Sept. 16..	13.50	1959
1954		Jan. 21.. 12.00
Jan. 18..	13.00	Feb. 11.. 11.50
Feb. 18..	12.50	Feb. 24.. 11.00
Mar. 9..	12.75	Mar. 5.. 11.50
Mar. 10..	13.00	April 1.. 11.00
Mar. 26..	13.25	April 20.. 11.50
Mar. 29..	13.50	May 7.. 12.00

**OPS Celling.

Antimonial Lead Stocks at Primary Refineries

(A.B.M.S.)

End of	(In tons of 2,000 pounds)	1956	1957	1958	1959
Jan.	8,389	10,487	12,689	11,789	
Feb.	9,095	10,220	12,309	12,111	
Mar.	10,289	9,794	12,144	12,065	
Apr.	10,690	9,391	12,468	13,355	
May	10,902	9,799	13,154	13,596	
June	9,452	9,503	12,856		
July	10,924	8,661	10,482		
Aug.	10,074	9,553	10,889		
Sept.	11,181	10,215	11,004		
Oct.	11,382	11,581	12,050		
Nov.	11,832	11,119	11,828		
Dec.	11,746	11,857	12,595		

Antimonial Lead Production by Primary Refineries

(A.B.M.S.)

End of	(In tons of 2,000 pounds)	1956	1957	1958	1959
Jan.	5,045	5,113	3,743	3,541	
Feb.	5,888	5,468	3,657	4,415	
Mar.	5,526	5,091	3,527	4,098	
Apr.	5,818	6,183	3,655	5,533	
May	5,405	6,978	4,827	4,618	
June	4,456	4,466	3,992		
July	3,853	5,372	2,775		
Aug.	5,343	7,967	5,244		
Sept.	6,709	7,574	4,761		
Oct.	5,378	6,148	5,849		
Nov.	6,993	3,791	3,913		
Dec.	5,766	3,290	4,539		

Total 66,180 67,541 50,482

Lead Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in pigs, bars, etc.; metric tons
except where otherwise noted.

IMPORTS

	1959	Feb.	Mar.	Apr.
U. S. (s.t.)	14,609	34,850	24,258	
Canada (s.t.)	7	1	...	
Belgium	851	...	...
Denmark	762	2,264		
France	692	3,872	3,818	
Germany, W.**	3,928	...	...
Italy††	1,784‡	...	...
Netherlands	2,746	3,078	2,321	
Norway	712	...	...
Sweden	495	1,175		
Switzerland	1,237	1,738	1,143	
U. K. (l.t.)	8,479	22,251	23,538	
India† (l.t.)	2,070	1,547	...	
EXPORTS				
U. S. (s.t.)	68	433	79	
Canada (s.t.)	6,376	11,831	7,836	
Belgium	2,632	...	...
Denmark	419	775	...	
France	1,554	2,631	1,032	
Germany, W.**	2,817	...	...
Netherlands	507	568	481	
Sweden	750	1,649	...	
Switzerland	7	...	...
Northern Rhodesia† (l.t.)	670	2,032	718	
Australia† (l.t.)	10,388	8,287	13,379	

* Refined.

** Includes scrap.

† Includes lead alloys.

† British Bureau of Non-Ferrous Metal Statistics.

‡ January-February.

French Lead Imports

(A. B. M. S.)

	(In metric tons)	1959	Mar.	Apr.	May
Ore (gr. wt.)	5,737	15,685	11,169		
Algeria	840	855	666		
Morocco	4,522	13,780	10,503		
Fr. Eq. Africa	375	1,050	...		
Pig lead	3,872	3,818	3,920		
Belgium	30	1,093	269		
German (W.)	...	505	28		
Algeria	14	72	...		
Morocco	1,434	804	1,576		
Tunisia	2,394	1,066	2,047		
Australia	...	278	...		
Antimonial lead	18	2	279		

U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

	(In tons of 2,240 lbs.)	1959	Mar.	Apr.	May
(Gross Weight)					
Lead and lead alloys	22,251	23,538	14,364		
Australia	16,259	15,099	8,965		
Canada	4,586	4,621	3,765		
Belgium	100	...	...
Peru	100	...	...
Other countries	1,206	3,818	1,634		

IT PAYS
to
ADVERTISE
in the
DAILY METAL REPORTER

U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

Metal Products	Jan.-Apr.	1959	Jan.-Apr.	1959
Ammunition	15,212	3,899	4,224	
Bearing metals	7,508	1,966	2,059	
Brass and bronze	8,353	2,283	2,386	
Cable covering	22,271	5,818	6,248	
Calking lead	22,422	5,807	6,312	
Casting metals	2,872	635	732	
Collapsible tubes	2,736	697	976	
Foil	1,221	250	329	
Pipes, traps and bends	7,335	1,795	2,059	
Sheet lead	9,338	2,350	2,577	
Solder	21,839	5,568	5,756	
Storage battery grids, posts, etc.	54,774	13,110	12,983	
Storage battery oxides	56,896	13,517	13,353	
Terne metal	723	95	233	
Type metal	9,150	2,384	2,367	
Total	242,650	59,674	62,594	

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1957	1958	1959
Jan.	29,657	29,607	28,872
Feb.	29,219	27,855	25,968
Mar.	29,144	29,713	26,691
Apr.	27,246	26,230	29,252
May	31,574	28,839	27,280
June	28,607	28,624	...
July	27,604	27,201	...
Aug.	24,756	21,726	...
Sept.	29,519	28,829	...
Oct.	32,486	31,356	...
Nov.	31,060	28,786	...
Dec.	26,530	27,154	...
Total	347,699	335,920	...

American Antimony

Monthly Average Prices

In bulk, f.o.b. Laredo

(Cents per lb. in ton lots)

	1956	1957	1958	1959
Jan.	33.00	33.00	33.00	29.00
Feb.	33.00	33.00	30,818	29.00
Mar.	33.00	33.00	29.00	29.00
Apr.	33.00	33.00	29.00	29.00
May	33.00	33.00	29.00	29.00
June	33.00	33.00	29.00	29.00
July	33.00	33.00	29.00	...
Aug.	33.00	33.00	29.00	...
Sept.	33.00	33.00	29.00	...
Oct.	33.00	33.00	29.00	...
Nov.	33.00	33.00	29.00	...
Dec.	33.00	33.00	29.00	...
Aver.	33.00	33.00	29.485	...

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks Mar. 31, 1959	Net Receipts in Apr.	Consumed in Apr.	Stocks April 30, 1959
Soft lead	79,127	60,496	59,017	80,606
Antimonial lead	36,091	19,552	20,548	35,095
Lead in alloys	6,969	4,455	4,155	7,269
Lead in copper-base scrap	1,166	1,722	1,814	1,074
Total	123,353	86,225	85,534	124,044

* Excludes 3,391 tons of lead which went directly from scrap to fabricated products and 346 tons of lead contained in leaded zinc oxide production.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

APRIL

	Soft lead	Antimonial lead	Lead in alloys	Lead in copper-base scrap	Total
Metal products	33,503	19,880	4,136	1,814	59,333
Pigments	10,382	17	...	...	10,399
Chemicals	13,115	3	...	...	13,118
Miscellaneous	686	594	...	...	1,280
Unclassified	1,331	54	19	...	1,404
Total	59,017	20,548	4,155	1,814	85,534

* Excludes 3,391 tons of lead which went directly from scrap to fabricated products and 346 tons of lead contained in leaded zinc oxide production.

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.

(Tons of 2,000 lbs.)

Stock Begin- ning	Pro- duction	Shipments			Stock at End	Daily Avg. Prod.
		Domes- tic	Export & Drawback	Gov't Acc't		
1950 Tl.	94,221	910,354	849,246	18,189	128,256	995,691
1950 Mo. Avg.	75,863	70,770	1,516	10,688	82,974	8,884
1951 Total	8,884	931,833	836,800	42,067	39,949	918,816
1951 Mo. Avg.	77,653	69,733	3,506	3,329	76,568	21,901
1952 Total	21,901	961,430	803,343	66,202	36,626	896,171
1952 Mo. Avg.	80,119	66,945	4,633	3,052	74,681	87,160
1953 Total	87,160	971,191	818,850	16,326	42,332	877,508
1953 Mo. Avg.	80,933	68,238	1,361	3,528	73,126	180,843
1954 Total	180,843	868,242	787,922	27,929	108,957	924,808
1954 Mo. Avg.	72,353	65,660	2,327	9,080	77,067	124,277
1955 Total	40,979	1,031,018	1,007,619	19,497	87,200	1,114,316
1955 Mo. Avg.	85,918	83,968	1,625	7,267	92,860	40,979
1956 Total	1,062,954	869,270	9,027	157,014	1,035,311	68,622
1956 Mo. Avg.	88,850	72,439	752	13,055	86,275	2,904
1957						
April	89,357	96,506	55,000	1,411	23,921	80,332
May	105,531	96,855	60,729	2,106	26,858	89,693
June	112,693	90,719	54,275	1,358	44,324	69,957
July	133,455	85,779	57,862	4,497	11,186	133,455
August	146,179	84,166	70,318	860	9,871	81,049
September	149,296	77,455	62,111	530	10,344	72,985
October	153,766	81,492	66,225	372	12,736	79,333
November	155,925	79,754	73,437	581	9,143	83,166
December	152,531	86,270	62,730	210	9,188	72,128
1957 Total	1,067,450	765,132	15,460	179,466	815,567	2,783
1958						
January	166,655	82,343	58,211	641	9,805	68,657
February	180,346	68,354	49,072	446	9,993	59,511
March	189,189	72,274	48,948	111	8,763	57,822
April	203,641	70,214	46,598	159	5,927	52,634
May	221,171	71,018	51,390	129	.....	51,519
June	240,670	66,967	54,487	171	.....	54,658
July	252,979	65,119	60,312	55	.....	60,187
August	257,911	62,927	68,718	591	.....	69,309
September	251,529	63,705	76,905	213	.....	77,118
October	238,116	65,304	93,018	226	.....	93,224
November	210,176	65,174	83,394	212	.....	83,606
December	191,744	75,503	76,862	148	.....	77,010
1958 Total	828,902	767,755	3,102	34,488	805,325	....

* Inflated by abnormal shipments on consignment of approximately 9,000 tons.

U. S. Consumption of Slab Zinc

Bureau of Mines

By Industries (Short Tons)

Galvan- izers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1950 Total	434,094	281,386	136,451	67,779	27,656
1951 Total	386,373	266,442	141,456	64,000	28,738
1952 Total	375,563	236,022	155,311	51,508	30,885
1953 Total	408,162	305,846	177,801	58,784	38,087
1954 Total	398,599	286,817	107,293	45,979	33,342
1955 Total	439,694	404,790	144,816	50,363	39,302
1956 Total	421,218	352,451	122,395	45,382	36,251
1957					
March	30,747	30,946	8,860	3,553	3,378
April	30,631	29,166	9,491	4,001	3,300
May	30,537	28,423	9,563	3,389	3,097
June	29,907	27,688	8,710	3,613	2,646
July	26,067	26,116	6,361	2,698	2,981
August	27,885	29,237	9,755	3,686	3,099
September	28,651	31,051	9,588	2,911	1,590
October	32,940	35,499	10,952	3,385	1,783
November	28,025	31,396	10,024	2,843	1,255
December	24,383	27,927	7,854	2,679	1,427
Total	355,796	358,543	111,114	39,544	20,486
1958					
January	26,861	26,348	9,115	3,183	1,664
February	24,598	22,629	7,279	2,716	1,316
March	27,171	19,045	6,871	3,138	1,724
April	27,464	17,829	6,392	3,259	1,295
May	30,935	18,316	6,597	2,896	2,263
June	34,377	21,497	6,643	2,961	2,212
July	30,677	17,387	6,275	2,848	1,920
August	34,663	20,382	8,358	3,379	1,901
September	34,048	25,188	9,624	3,458	770
October	36,513	27,682	11,753	3,845	881
November	31,658	27,311	10,067	3,276	826
December	31,746	29,926	10,529	3,681	1,018
Total	370,441	273,540	92,906	38,690	16,772
1959					
January	31,729	29,110	11,172	3,874	2,521
February	31,672	26,448	11,508	3,418	2,864
March	37,287	29,286	12,889	3,629	3,203
April	38,541	31,262	12,304	3,715	3,223

METALS, JULY, 1959

Prime Western Zinc Prices

(East St. Louis, f.o.b.)

(Cents per pound)				
(In tons of 2,240 pounds)				
1956	1957	1958	1959	
Jan.	13.46	13.50	10.00	11.50
Feb.	13.50	13.50	10.00	11.411
Mar.	13.50	13.50	10.00	11.00
Apr.	13.50	13.50	10.00	11.00
May	13.50	11.933	10.00	11.00
June	13.50	10.84	10.00	11.00
July	13.50	10.00	10.00	....
Aug.	13.50	10.00	10.00	....
Sept.	13.50	10.00	10.00	....
Oct.	13.50	10.00	10.865	....
Nov.	13.50	10.00	11.386	....
Dec.	13.50	10.00	11.50	....
Aver.	13.497	11.40	10.313	....

High Grade Zinc Prices

(Delivered)				
N. Y. Monthly Averages				
(Cents per pound)				
1956	1957	1958	1959	
Jan.	14.81	14.85	11.35	12.50
Feb.	14.85	14.85	11.35	12.411
Mar.	14.85	14.85	11.35	12.00
Apr.	14.85	14.85	11.084	12.00
May	14.85	13.283	11.00	12.00
June	14.85	12.19	11.00	12.00
July	14.85	11.35	11.00	....
Aug.	14.85	11.35	11.00	....
Sept.	14.85	11.35	11.00	....
Oct.	14.85	11.35	11.865	....
Nov.	14.85	11.35	12.386	....
Dec.	14.85	11.35	12.50	....
Aver.	14.847	12.75	11.407	....

U. K. Zinc Consumption

(British Bureau of Non-Ferrous Metal Statistics)			
(In Tons of 2,240 Pounds)			
1957	1958	1959	
Jan.	28,485	27,473	27,849
Feb.	26,276	24,551	25,676
Mar.	27,049	26,967	27,243
Apr.	24,247	24,984	23,006
May	29,589	24,579	26,167
June	25,202	25,557	....
July	25,934	23,794	....
Aug.	20,381	19,076	....
Sept.	27,792	26,747	....
Oct.	29,552	29,838	....
Nov.	26,705	26,432	....
Dec.	24,419	26,042	....
Total	315,631	306,070	....

IT PAYS
to
ADVERTISE
in the
DAILY METAL REPORTER

**Mine Production of Zinc
in United States**
(U. S. Bureau of Mines)

	(In short tons)			
	Eastern States	Central States	Western States	Total U.S.*
1954				
Total	166,487	63,100	234,942	464,539
1955				
Total	163,230	73,630	277,811	514,671
1956				
Total	175,310	61,080	301,253	537,643
1957				
Nov.	14,874	180	19,213	34,967
Dec.	13,893	173	18,683	34,364
Total	196,877	29,506	290,151	520,128
1958				
Jan.	16,165	1,682	20,861	38,708
Feb.	13,652	1,365	18,528	33,545
Mar.	13,922	1,291	20,411	35,624
Apr.	15,719	1,311	22,375	39,405
May	15,580	1,314	18,940	35,834
June	14,931	1,490	16,650	32,971
July	13,427		15,985	29,442
Aug.	15,760		13,627	29,387
Sept.	14,857		15,279	29,865
Oct.	16,197		16,074	32,271
Nov.	15,393		16,998	32,391
Dec.	15,064		16,939	32,003
Total	181,202	8,450	213,267	402,919
1959				
Jan.	16,319		19,117	35,436
Feb.	16,405		19,304	35,709
Mar.	17,602		18,822	36,424
Apr.	18,521		19,149	37,570
May	18,500		19,193	37,693

*Includes Alaskan output in some months.

**Mine Production of Lead
in United States**
(U. S. Bureau of Mines)

	(In short tons)			
	Eastern States	Central States	Western States	Total U.S.*
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Ttl.	8,608	138,940	169,804	317,352
1955				
Ttl.	10,379	145,640	177,409	333,409
1956				
Ttl.	11,395	141,900	195,034	348,329
1957				
Dec.	599	9,887	12,393	22,880
Ttl.	9,300	135,800	188,392	333,493
1958				
Jan.	675	12,513	12,613	25,801
Feb.	542	11,356	11,734	23,632
Mar.	526	4,633	13,148	18,307
Apr.	487	12,438	12,739	25,664
May	626	11,660	11,939	24,225
June	615	10,662	11,499	22,776
July	454	10,019	10,662	21,135
Aug.	447	8,859	9,512	18,818
Sept.	389	7,734	11,221	19,344
Oct.	517	9,290	11,467	21,274
Nov.	606	10,500	11,823	22,929
Dec.	565	9,600	11,699	21,865
Ttl.	6,816	119,070	140,033	265,920
1959				
Jan.	469	9,748	13,180	23,397
Feb.	501	8,457	12,392	21,578
Mar.	601	7,943	12,585	21,129
Apr.	454	8,103	12,635	21,192
May	413	7,253	12,686	20,352

**Mine Production of Gold
in United States**
(U. S. Bureau of Mines)

	Eastern States	Western States	Alaska*	Total
1955				
Ttl.	2,026	1,634,625	247,535	1,884,186
1956				
Ttl.	1,998	1,607,930	204,300	1,814,228
1957				
Dec.	181	123,250	6,790	130,221
Ttl.	2,174	1,556,450	210,000	1,768,624
1958				
Jan.	207	134,282	2,736	137,226
Feb.	147	116,392	59	116,588
Mar.	174	123,808	96	124,078
Apr.	192	124,705	906	125,615
May	203	124,490	557	125,520
June	182	122,277	8,484	130,943
July	38	116,775	29,735	146,528
Aug.	174	113,281	34,947	148,202
Sept.	156	128,613	38,960	167,459
Oct.	186	135,882	42,467	178,535
Nov.	—	—	—	—
Dec.	—	—	10,373	144,757
1959				
Jan.	—	—	1,003	145,077
Feb.	—	—	233	128,614
Mar.	—	—	106	135,192
Apr.	—	—	106	133,937

* Alaska totals based on mint and smelter receipts.

U. S. Silver Production*
(A.B.M.S.)

	(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)	Dom. [†]	For.	Total
1954 Total	38,069	39,422	77,481	
1955 Total	33,101	32,780	65,881	
1956 Total	38,157	40,160	76,317	
1957				
Nov.	2,731	3,374	6,105	
Dec.	3,029	2,872	5,901	
Total	36,279	34,932	71,211	
1958				
January ...	3,520	3,551	7,071	
February ...	3,589	2,790	6,379	
March ...	2,465	3,568	6,033	
April ...	3,123	3,056	6,179	
May ...	2,597	2,660	5,257	
June ...	3,243	3,210	6,453	
July ...	2,127	2,494	4,621	
August ...	2,651	3,235	5,886	
September ...	2,614	3,165	5,779	
October ...	3,831	2,750	6,581	
November ...	2,505	3,283	5,788	
December ...	3,275	3,652	6,927	
Total ...	35,540	37,414	72,954	
1959				
January ...	2,330	4,460	6,790	
February ...	2,827	2,913	5,740	
March ...	2,823	4,087	6,910	
April ...	2,946	3,233	6,179	
May ...	2,641	3,484	6,125	

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

Average Silver Prices

	(Cents per fine ounce)	1956	1957	1958	1959
Jan.	90.357	91.375	89.449	90.19	
Feb.	90.90	91.375	88.625	90.444	
Mar.	91.128	91.375	88.625	91.351	
Apr.	90.875	91.375	88.625	91.375	
May	90.75	91.307	88.625	91.375	
June	90.46	90.456	88.625	91.375	
July	90.14	90.31	88.625	...	
Aug.	90.614	90.909	88.625	...	
Sept.	90.75	90.602	88.673	...	
Oct.	90.722	90.625	89.966	...	
Nov.	91.375	90.382	90.125	...	
Dec.	91.375	89.80	89.932	...	
Aver.	90.79	90.824	89.043	...	

Note — The averages are based on the price of refined bullion imported on or after August 31, 1943.

METALS, JULY, 1959

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Mar.	Apr.	May
Ore, matte & regulus (cont.)	8,932	4,624	3,974
Canada	31	456	34
Mexico	235	157	116
Cuba	1,075	...	...
Argentina	...	9	...
Bolivia	...	11	1
Chile	2,513	883	1,687
Peru	815	87	347
Cyprus	...	...	1,739
Philippines	2,701	1,581	...
U. of S. Africa	1,525	1,370	...
Australia	31	77	22
Other countries	6	2	19
Blister copper (content)	23,636	20,678	18,879
Mexico	2,692	1,359	1,866
Chile	16,325	14,517	15,902
Rhodesia & Nyasaland	1,852	1,478	...
U. of S. Africa	555	1,111	1,111
Australia	2,212	2,209	...
Other countries	...	4	...
Refined cathodes and shapes	3,815	5,027	11,777
Canada	3,767	4,003	8,566
Mexico	...	28	161
Chile	...	100	...
Peru	...	...	1,332
Belgium	...	...	28
Germany (W.)	...	...	280
Sweden	...	560	...
Belgian Congo	...	...	300
Rhodesia & Nyasaland	...	336	410
U. of S. Africa	...	...	700
Other countries	48	...	...
Total Imports:			
Crude & refined	36,383	30,329	34,630
Old and scrap (content)	351	300	709
Brass scrap and old (cu. cont.)	420	120	473

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Mar.	Apr.	May
Zinc ore (content)	36,892	48,955	41,875
Canada	13,857	11,164	11,683
Mexico	11,184	8,367	18,774
Honduras	260	250	142
Bolivia	576	...	51
Chile	...	...	34
Peru	8,345	7,949	8,121
Italy	...	4,733	1,250
Soviet Union	...	298	24
Spain	...	4,853	1,446
U. of S. Africa	2,374	455	...
Australia	233	10,686	283
Philippines	4	11	4
Other countries	59	189	63
Zinc blocks, pigs, etc.	16,005	6,505	17,151
Canada	11,143	3,281	7,685
Mexico	238	670	1,561
Peru	525	302	3,529
Belgium	1,532	771	...
Italy	1,020	960	220
Yugoslavia	...	...	220
Belgian Congo	1,547	149	1,535
Australia	...	372	2,401
Total Imports:			
Zinc ore, blocks, pigs	52,897	55,460	59,026
Dross and skim	48	122	49
Old and worn out	30	1	...

METALS, JULY, 1959

U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Mar.	Apr.	May
Ore, conc., matte & other unref. (cont.)	401	38	456
Refined ingots, bars, etc.†	19,404	20,571	15,301
Canada	375	141	140
Cuba	3	1	1
Argentina	496	110	993
Brazil	589	881	317
Belgium	...	17	...
Denmark	112	112	145
France	7,723	8,305	3,594
Germany (W.)	2,222	5,458	3,752
Italy	2,040	1,825	1,414
Netherlands	644	261	280
Norway	280	280	392
Sweden	307	112	180
Switzerland	672	112	112
United Kingdom	3,546	2,574	2,770
Formosa	...	763	...
Japan	82	205	448
Australia	280	168	...
Other countries	33	9	...
Total Exports:			
Crude & refined	19,805	20,609	15,757
Pipes and tubes	62	148	48
Plates and sheets	51	19	30
Semifabricated forms	192	605	249
Wire, bare	180	182	429
Building wire and cable‡	242	233	172
Weatherproof wire‡	6	6	24
Insulated copper wire n.e.s.‡	745	644	5,725

† Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.

‡ Gross weight; n.e.s.—not elsewhere specified.

U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Mar.	Apr.	May
Ore, conc. (content)	...	...	1
Slabs, blocks, etc.	745	350	124
Canada	2	...	3
Mexico	148	94	55
Netherlands	56	123	...
Sweden	...	67	45
India	537	52	...
Other countries	2	14	21
Total Exports:			
Ore, conc., slabs, blocks	745	350	125
Scrap, ashes, dross and skimmings	808	305	238
Battery shells and parts, un-assembled	65	...	10
Roiled in sheets, plates and strips and die castings	308	290	319
Zinc & zinc alloys in crude and semifabricated forms	105	167	44
Zinc Oxide	239	308	212

Comparative Metal Prices

	Av.	OPA	1959
Copper, domestic	1939	1946	June 18
Electro., Del. Val.	11.20	14,375	31,50
Lead (N. Y.)	5.05	8.25	12.00
P. W. Zinc (E. St. Louis, f.o.b.)	5.05	5.05	11.00
New York, del.	...	...	11.50
Tin, Spot Straits, N. Y.	...	...	104.50 ^{Nom.}
Aluminum ingot 99 1/2% + 20.00	15.00	26.80	
Antimony (R.M.M. brand, f.o.b. Laredo)	12.36	14.50	29.00

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Mar.	Apr.	May
Ore, matte, etc. (content)	20,031	9,333	4,470
Canada	2,549	1,573	2,591
Mexico	87	53	34
Honduras	609	249	197
Bolivia	3,332	...	398
Chile	113	...	...
Peru	7,011	887	739
U. of S. Africa	5,079	4,323	...
Australia	1,183	2,196	436
Philippines	56	28	53
Other countries	17	24	22
Base bullion (content)	...	5	...
Other countries	...	5	...
Total Imports:			
Pigs and bars	34,850	24,258	36,205
Canada	4,451	3,331	5,272
Mexico	11,383	11,775	12,832
Peru	1,791	19	5,624
Germany (W.)	1,515	...	...
Netherlands	2	...	...
Spain	4,326	...	...
Sweden	...	2,205	330
United Kingdom	...	298	...
Yugoslavia	4,214	882	6,870
Morocco	2,207	2,125	...
Australia	4,961	3,620	5,277
Other countries	...	3	...
Total Imports:			
Ore, base bullion, refined	54,881	33,596	40,675
Lead scrap, dross, etc. (cont.)	1,605	370	245
Antimonial lead & typemetal	...	475	610
Lead content thereof	...	448	491

U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Mar.	Apr.	May
Copper scrap, unalloyed* (new and old)	928	1,533	796
Canada	21	339	114
Argentina	218	818	274
France	...	...	59
Germany (W.)	287	88	86
Hungary	28	83	27
Italy	...	139	28
Netherlands	...	...	22
Spain	50	...	...
India	64	66	153
Japan	56	...	33
Other countries	204	...	...
Copper-base scrap, alloyed† (new and old)	2,620	2,029	3,077
Canada	4	...	...
Mexico	1	...	...
Belgium	25	...	...
France	13	...	...
Germany (W.)	429	148	311
Italy	5	...	...
Netherlands	160	54	37
Portugal	17	...	...
Spain	34	21	...
India	144	76	121
Japan	1,700	1,568	2,483
Hong Kong	104	130	61
Other countries	22	15	43

† Includes Ash, brass mill, clippings, *78908.

* Ash, brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.

† Copper-base alloys, including brass and bronze—Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

World Production of Copper

(American Bureau of Metal Statistics)

	United States	Canada	Mexico (crude)	Chile	Peru	Fed. Rep. of Germany	Norway	United Kingdom	Yugo- slavia	India	Japan	Turkey	Australia	Northern Rhodesia (e)	Union of South Africa (d)
	(a)	(b)	(c)	(d)	(d)	(a)	(f)	(g-h)	(e)	(f-h)	(e)	(f)	(e)	(e)	
1955															
Total	1,036,702	326,599	61,583	447,288	35,478	286,805	14,876	138,271	31,151	8,432	124,908	26,313	41,935	350,302	47,176
1956															
Total	1,133,134	356,251	69,918	506,251	35,005	279,461	16,457	127,365	32,390	8,827	139,062	27,101	55,711	435,186	47,914
Dec.	95,285	35,593	5,446	43,765	4,786	21,786	1,424	9,607	3,207	810	13,038	2,114	4,388	42,459	4,672
Total	1,115,483	360,745	42,995	...	46,141	253,710	17,265	121,797	37,186	9,298	143,654	27,101	55,633	499,418	47,828
1958															
Jan.	94,725	32,841	5,272	41,578	3,990	23,790	1,554	7,909	3,000	348	12,345	2,091	4,334	42,996	4,285
Feb.	87,130	30,639	4,849	39,648	3,235	21,792	1,340	11,495	3,054	756	10,806	1,509	4,045	36,364	4,708
Mar.	90,336	34,190	5,954	40,205	3,497	25,161	1,569	9,559	6,023	821	10,195	2,580	5,555	44,847	4,731
April	86,123	32,635	6,101	40,10	3,416	23,256	1,463	9,884	3,149	788	8,515	2,942	6,220	41,396	4,413
May	80,628	32,471	6,141	23,264	3,481	24,543	1,636	7,095	2,957	786	9,806	2,574	6,229	41,615	4,488
June	71,220	32,418	5,954	34,811	3,405	23,128	1,674	7,415	3,102	769	10,617	1,810	6,819	44,447	4,018
July	64,444	31,131	5,995	40,495	3,780	24,418	1,610	9,091	3,245	801	10,762	1,136	6,139	44,010	3,824
Aug.	67,917	50,887	6,340	45,211	3,646	26,409	1,855	3,451	2,838	786	11,063	...	6,220	42,000	4,974
Sept.	79,541	27,546	6,294	40,913	3,637	24,649	1,749	12,027	2,870	792	12,583	...	...	17,291	4,726
Oct.	92,214	22,572	5,380	47,230	2,950	27,635	1,618	11,225	3,616	809	13,310	...	...	4,749	
Nov.	96,369	20,368	5,040	46,310	3,923	24,932	1,594	8,542	3,462	774	11,764	...	...	25,612	4,249
Dec.	97,641	19,023	5,066	46,284	3,196	25,569	1,597	9,042	2,929	832	15,054	...	...	45,935	4,406
Total	1,881,170	346,816	68,388	462,066	42,750	295,312	19,529	106,134	37,116	9,062	136,612	24,676	72,361	426,513	53,090
1959															
Jan.	95,542	24,669	5,342	44,579	3,115	25,945	1,724	7,856	3,685	679	17,385	2,469	5,344	48,699	4,600
Feb.	88,432	28,016	4,110	45,889	1,627	24,289	1,599	9,211	3,521	557	11,388	...	5,930	44,420	4,339
Mar.	101,410	32,427	4,771	44,554	1,601	26,959	1,694	8,654	3,536	810	10,746	...	...	51,630	...
April	98,376	32,028	5,201	42,715	4,256	26,770	...	11,258	...	763	17,938	...	...	48,150	...
May	104,372	...	5,275	...	3,776	...	...	...	...	...	...	...	...	53,067	...

(a) Reported by Copper Institute. Crude, "recoverable contents of mine production or smelter production or shipments, and custom intake." Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, etc., exported. (c) Crude copper, i.e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e.g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. * Refined.

World Production of Refined Lead

(American Bureau of Metal Statistics)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugo- slavia	Japan	Australia (a)	French Morocco	Tunisia	Rho- desia	Total
	(a)	(b)	(c)	(d)	(a)	(f)	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	
1955																
Total	547,153	148,811	221,138	67,303	91,241	73,251	162,508	46,806	67,509	83,347	40,912	254,558	28,870	28,620	17,976	1,893,125
1956																
Total	613,293	147,865	213,524	61,917	111,479	73,251	178,713	42,780	64,824	83,507	51,019	256,300	30,993	26,623	17,024	1,984,344
Dec.	50,509	12,504	19,465	6,951	8,191	7,512	17,215	4,231	5,460	7,846	5,785	24,005	4,173	3,123	1,568	180,412
Total	604,533	142,935	218,266	55,971	...	94,509	195,136	42,336	61,332	85,313	59,670	261,035	34,442	27,069	12,364	2,041,530
1958																
Jan.	47,665	12,672	20,144	6,188	8,375	7,501	18,017	4,013	5,297	6,042	4,974	25,518	3,323	1,785	1,232	173,922
Feb.	47,133	11,432	18,341	5,306	8,347	7,959	15,939	4,433	5,337	7,452	4,352	23,628	3,326	2,781	1,176	167,791
Mar.	43,441	12,837	18,455	6,899	8,773	7,890	16,548	4,597	6,392	8,600	4,335	26,359	3,375	1,174	1,204	171,654
April	40,984	11,785	21,099	5,626	8,917	8,858	15,144	4,652	6,281	7,021	3,481	19,876	2,338	2,394	1,204	160,946
May	47,487	12,212	21,005	5,421	9,058	8,339	16,327	4,240	6,944	7,482	3,541	25,035	3,532	2,978	1,204	174,255
June	44,636	12,706	17,846	6,255	8,264	7,977	15,194	3,677	6,403	6,469	3,461	22,979	2,906	3,127	1,232	164,278
July	38,827	7,175	18,315	6,880	8,544	8,319	11,229	4,581	6,327	6,872	3,567	21,563	568	1,232	1,232	147,624
Aug.	39,250	6,940	17,991	6,100	7,495	15	13,760	4,584	6,913	5,414	3,610	19,942	2,584	2,756	1,176	140,501
Sept.	43,269	10,908	16,256	5,192	7,849	8,202	15,700	4,367	5,692	6,942	3,587	22,612	2,184	2,369	1,120	158,285
Oct.	45,467	12,598	11,968	5,074	7,940	9,308	17,130	4,639	7,121	9,242	3,522	24,482	3,560	2,410	1,176	164,818
Nov.	40,496	10,645	17,067	6,448	9,495	9,068	17,785	4,825	6,914	11,155	3,555	20,148	2,625	2,519	1,120	165,406
Dec.	44,042	11,076	20,902	5,344	10,342	10,351	18,370	5,101	7,069	11,212	3,769	21,492	4,002	2,779	1,120	179,309
Total	575,612	130,886	246,443	80,999	119,192	111,337	223,973	60,860	77,490	92,903	52,915	271,654	42,266	32,359	16,492	1,955,753
1959																
Jan.	43,652	14,073	19,031	4,951	10,761	6,694	18,658	4,636	6,215	4,082	6,086	24,470	2,575	1,068	1,344	...
Feb.	39,498	12,740	15,472	6,262	9,460	5,812	17,869	4,437	6,020	8,596	6,474	22,037	2,319	1,765	1,344	...
Mar.	39,238	13,704	16,305	3,424	8,447	6,733	17,553	3,168	6,196	8,153	6,889	20,144	1,905	2,429	1,344	...
April	40,606	13,621	16,621	4,438	8,038	5,541	16,950	4,942	6,736	...	...	2,726	2,155	1,344	1,344	...
May	39,101	16,934	6,606	...	...	...	...	...	...	...	...	...	...	...	1,344	...

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

World Production of Slab Zinc

(American Bureau of Metal Statistics)

	United States	Can.	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Great Britain	Italy	Nether- lands	Spain	Tugo- slovia	Japan	Austra- lia (a)	Rho- desia (b)	Total (d)	
	(a)	(b)	(b-c)	(d)	(a)	(f)	(a)	(b)	(c)	(d)	(b)	(a)	(b)	(a)	(b)		
1955	1,031,018	257,008	61,879	18,943	233,623	123,623	197,024	90,917	77,761	31,202	49,724	26,244	15,175	122,965	113,221	31,248	2,534,457
1956																	
Total	1,062,954	255,601	62,136	10,428	251,906	124,105	204,961	90,784	80,407	32,123	53,170	25,224	15,434	153,821	117,445	32,396	2,630,383
Dec.	86,270	21,829	5,441	3,333	22,274	12,413	17,694	7,483	6,596	2,742	4,488	2,789	2,189	13,638	10,895	2,828	230,624
Total	1,574,500	247,356	62,354	35,772	259,707	148,455	202,627	86,348	81,179	32,784	52,787	24,279	30,256	152,145	123,587	33,040	2,691,699
1958																	
Jan.	82,343	21,801	5,561	3,271	22,382	12,795	17,187	7,179	4,911	2,654	4,134	2,209	2,943	13,126	10,816	2,828	221,112
Feb.	68,354	19,743	4,985	2,669	22,026	12,028	15,562	5,599	5,275	2,659	4,030	1,975	2,797	12,072	9,642	2,576	199,114
Mar.	72,274	22,314	5,620	2,782	21,453	13,786	16,743	7,584	6,849	2,709	3,851	2,045	3,013	13,217	10,707	2,856	214,049
April	70,214	20,989	5,289	2,597</													

U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	Virgin	Zinc	Zinc Conc.
At start	1958	1959	1958 1959
of:	1958	1959	
Jan.	44,926	34,166	79,349 56,371
Feb.	43,308	34,805	82,125 58,518
Mar.	46,662	36,850	87,721 57,897
Apr.	46,608	38,457	84,631 52,151
May	47,251	38,643	80,964 47,936
June	50,539	37,713	74,470 41,954
July	49,613	....	71,553
Aug.	48,497	....	70,105
Sept.	45,590	....	63,909
Oct.	45,784	....	57,376
Nov.	39,341	....	53,371
Dec.	35,396	....	58,022

U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959		
(Gross Weight)	Mar.	Apr.	May
Zinc ore and conc.	6,156	4,583	4,519
Zinc conc.†	2,742	2,476	‡
Australia	2,155	1,560	...
Burma	535	3	...
Other countries	52	913	...
Zinc and zinc alloys:			
(Gross Wt.)	15,437	14,984	12,764
Rhodesia			
Nyasaland	175	200	300
Australia	975	...	825
Canada	7,825	8,502	5,491
Belgium	1,484	1,196	2,515
Germany (W.)	801	125	...
Netherlands	719	700	500
Soviet Union	1,412	1,412	1,187
United States	8	290	381
Belgian Congo	500	825	700
Other countries	1,538	1,734	865

† British Bureau of Non-Ferrous Metal Statistics. The estimated zinc content is not the content of the gross weight as officially reported for any comparable period.

‡ Not available.

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959		
(Gross Weight)	Mar.	Apr.	May
Copper unwrought			
—ingots, blocks, slabs, bars, etc.	5,901	5,002	4,248
Plates, sheets, rods, etc.	1,342	1,600	1,529
Wire (including uninsulated electric wire)	423	364	327
Tubes	1,013	1,326	1,255
Other copper, worked (including pipe fittings)	65	134	58
Total	8,744	8,426	7,417

Copper Consumption in United Kingdom

(British Bureau of Non-Ferrous Metal Statistics)

	(In tons of 2,240 pounds)		
	Unalloyed	Alloyed*	Total
1956 Total	388,167	251,312	639,479
1957 Total	407,326	234,158	641,484
1958			
January	35,799	20,816	56,615
February	32,207	19,352	51,559
March	33,491	19,580	53,071
April	36,722	19,100	55,822
May	35,810	18,423	54,233
June	39,277	18,141	57,418
July	36,743	17,091	53,564
August	28,416	13,756	42,181
September	42,813	18,596	61,408
October	43,402	21,788	65,190
November	40,987	19,232	60,219
December	37,580	19,118	56,698
Total	442,977	225,001	667,978
1959			
January	32,678	21,217	52,979
February	29,373	19,020	48,293
March	27,864	19,567	47,431
April	32,742	22,782	55,525
May	28,421	19,199	47,620

* Includes copper sulphate effective October, 1954.

U. K. Virgin Copper Stocks

(In long tons)

(British Bureau of Non-Ferrous Metal Statistics)

Zinc Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1959		
	Feb.	Mar.	Apr.
U. S. (s.t.)	6,807	16,005	6,505
Canada (s.t.)	12	1	...
Belgium	15	...	...
Denmark	780	1,805	...
France	1,094	875	1,451
Germany, W.	5,777	...	...
Italy	1,410	...	...
Netherlands	725	775	1,255
Sweden	1,592	1,019	...
Switzerland*	654	777	1,008
U. K. (l.t.)	15,674	15,437	14,984
India† (l.t.)	3,143	5,354	3,972

	EXPORTS		
	U. S. (s.t.)	183	745
Canada (s.t.)	15,945	22,731	7,690
Belgium	8,520	...	...
Denmark	3	...	...
France	20	...	...
Germany, W.	1,288	...	...
Italy	3,063	...	...
Netherlands	731	1,138	1,126
Norway	2,348	...	...
Switzerland*	227	398	536
U. K.** (l.t.)	368	401	505
Northern Rhodesia† (l.t.)	2,015	2,565	2,452

* Includes scrap.

** Includes manufactures.

† British Bureau of Non-Ferrous Metal Statistics.

‡ January-February.

U. K. Refined Lead Stocks

(British Bureau of Non-Ferrous Metal Statistics)

(In long tons)

	1957	1958	1959
At start of:	59,614	91,477	64,184
Jan.	59,203	82,483	65,941
Feb.	62,120	89,147	65,875
Mar.	61,779	94,330	72,946
April	71,101	88,582	72,318
May	61,991	88,913	78,505
June	64,121	81,851	...
July	81,146	84,756	...
Aug.	98,595	89,899	...
Sept.	100,815	85,092	...
Oct.	90,877	74,686	...
Nov.	81,657	69,023	...
Dec.	40,804	34,608	63,135
July	42,148	40,518	...
Aug.	48,275	37,148	...
Sept.	51,435	43,758	...
Oct.	45,301	48,856	...
Nov.	50,371	40,216	...
Dec.	48,065	35,335	...

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	Tin Content of Tin in Ore		
	Imports	Production*	Stock at end of period*
1957 Total	39,272	1,028	...
1958			
April	2,678	82	4,407
May	2,707	101	3,872
June	1,815	104	2,431
July	2,007	107	2,020
August	2,235	44	3,299
September	1,743	99	1,564
October	1,913	91	1,419
November	1,971	96	1,770
December	2,757	90	2,299
1958 Total	27,419	1,090	13,195
1959			
January	1,337	113	1,095
February	1,817	116	230
March	1,645	...	1,572

* As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)

(In Tons)

	1956	1957	1958	1959
Jan.	26,653	25,469	32,868	24,721
Feb.	26,229	21,861	28,668	28,016
Mar.	26,750	27,663	29,239	32,427
Apr.	26,617	27,398	30,635	32,028
May	27,626	29,086	32,471	....
June	27,122	24,093	32,418	....
July	27,250	27,195	31,131	....
Aug.	29,219	26,943	30,867	....
Sept.	27,950	24,633	27,546	....
Oct.	29,696	30,312	22,572	....
Nov.	27,346	27,331	20,368	....
Dec.	28,718	31,804	19,033	....
Year	331,174	323,588	346,816	....

Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)

(In Tons)

	1956	1957	1958	1959
Jan.	4,888	8,946	4,752	5,034
Feb.	3,856	6,633	1,553	6,377
Mar.	4,007	7,044	9,497	11,831
Apr.	7,636	7,314	7,450	7,836
May	7,214	9,676	7,764	....
June	6,632	7,210	4,036	....
July	9,696	4,682	12,629	....
Aug.	4,713	6,416	7,232	....
Sept.	9,908	8,467	5,125	....
Oct.	9,072	7,761	10,320	....
Nov.	9,227	6,175	10,641	....
Dec.	2,734	4,217	11,352	....
Year	79,633	84,541	92,351	....

Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)

(Fine Ounces)

	1957	1958	1959
Jan.	253,940	634,715	185,367
Feb.	380,463	208,149	329,742
Mar.	521,849	350,827	425,973
Apr.	431,646	284,971	989,593
May	523,228	376,082	....
June	468,559	438,253	....
July	844,545	529,770	....
Aug.	811,530	279,511	....
Sept.	861,857	583,570	....
Oct.	432,000	323,475	....
Nov.	263,273	217,892	....
Dec.	186,569	871,573	....
Year	5,979,459	5,098,788	....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)

(In Tons)

	1956	1957	1958	1959
Jan.	15,981	20,582	26,883	10,620
Feb.	11,041	16,272	16,816	10,304
Mar.	12,276	14,270	18,662	11,025
Apr.	14,476	16,417	23,261	17,079
May	12,851	19,048	19,358	....
June	10,985	10,826	20,831	....
July	13,599	18,621	21,703	....
Aug.	14,710	21,980	15,881	....
Sept.	17,268	14,314	15,373	....
Oct.	13,896	13,110	20,341	....
Nov.	19,130	16,622	14,391	....
Dec.	18,630	16,282	11,138	....
Year	174,843	198,794	224,638	....

Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)

(In Tons)

	1956	1957	1958	1959
Jan.	21,696	20,340	21,801	21,456
Feb.	20,356	19,808	19,743	19,709
Mar.	22,010	21,941	22,314	22,135
Apr.	21,339	20,504	20,989	21,512
May	21,790	20,564	21,269	....
June	20,780	19,928	20,353	....
July	21,691	20,061	20,873	....
Aug.	21,354	20,305	21,152	....
Sept.	20,691	20,247	20,530	....
Oct.	21,412	20,892	21,125	....
Nov.	20,470	20,933	20,273	....
Dec.	22,012	21,823	21,705	....
Year	255,607	247,351	252,157	....

Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1957	1958	1959
Jan.	2,158,631	2,529,583	3,094,440
Feb.	2,051,679	2,294,655	2,264,903
Mar.	2,346,316	2,448,698	2,782,307
Apr.	2,225,638	2,558,958	2,690,498
May	2,111,185	2,650,665	....
June	2,208,584	2,527,632	....
July	2,383,390	2,385,687	....
Aug.	2,592,468	2,884,154	....
Sept.	2,382,121	2,856,304	....
Oct.	2,817,358	2,390,027	....
Nov.	2,566,519	2,643,790	....
Dec.	2,537,984	2,917,528	....
Year	28,361,873	31,087,681	....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*

(In Tons)

	1956	1957	1958	1959
Jan.	16,002	14,032	17,117	17,118
Feb.	14,344	15,170	14,908	15,923
Mar.	16,857	16,940	15,421	17,389
Apr.	11,573	14,275	15,644	16,257
May	15,446	14,591	15,131	....
June	18,145	16,431	15,645	....
July	15,841	14,377	14,076	....
Aug.	18,104	14,679	12,260	....
Sept.	15,760	15,869	15,401	....
Oct.	16,725	14,151	14,564	....
Nov.	14,865	15,879	16,680	....
Dec.	16,056	15,296	18,248	....
Year	188,971	171,670	185,095	....

* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1956	1957	1958	1959
Jan.	15,550	19,304	17,349	13,565
Feb.	11,757	16,618	8,376	12,675
Mar.	8,822	14,923	19,636	14,617
Apr.	14,317	17,131	16,346	....
May	11,357	16,680	15,122	....
June	15,296	16,157	7,776	....
July	15,499	12,912	27,394	....
Aug.	13,070	20,520	15,906	....
Sept.	19,732	17,871	8,670	....
Oct.	20,792	16,735	22,810	....
Nov.	21,411	17,225	17,978	....
Dec.	16,125	16,131	18,344	....
Year	183,728	202,007	195,707	....

Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1956	1957	1958	1959
Jan.	14,985	16,609	16,710	8,047
Feb.	14,997	15,027	15,896	12,616
Mar.	15,504	16,733	15,853	14,922
Apr.	14,431	15,347	15,163	15,493
May	15,203	16,225	15,231	....
June	14,492	15,447	14,603	....
July	15,125	15,878	12,851	....
Aug.	14,852	16,756	12,597	....
Sept.	14,530	15,604	11,786	....
Oct.	15,762	15,628	3,682	....
Nov.	15,062	14,587	3,178	....
Dec.	14,824	15,096	3,298	....
Year	178,767	188,962	140,842	....

METALS, JULY, 1959

Canadian Copper Exports

(Dominion Bureau of Statistics)

	(In tons of 2,000 lbs.)		
	Feb.	Mar.	Apr.
Ore, matte, regulus, etc. (content)	2,476	2,625	2,013
United States	469	230	883
Norway	391	2,095	1,053
United Kingdom	11	51	77
Japan	1,605	249	...
Ingots, bars, billets, anodes	10,304	11,025	17,079
United States	2,705	3,707	4,171
Brazil	66	49	95
Belgium	280	...	831
France	840	1,176	1,232
Germany (W.)	728	728	784
Italy	84	...	...
United Kingdom	5,404	5,308	9,907
India	28	...	...
Japan	110	...	...
Other countries	59	57	59
Total Exports:			
Crude & refined	12,780	13,650	19,092
Old and scrap	190	466	430
Rods, strips, sheet & tubing	358	576	798

Canadian Zinc Exports

(Dominion Bureau of Statistics)

	(In tons of 2,000 lbs.)		
	Feb.	Mar.	Apr.
Ore (zinc content)	12,675	14,617	12,789
United States	12,675	14,617	12,789
Slab zinc	15,945	22,731	7,690
United States	3,376	11,519	3,352
Brazil	220	110	221
Chile	77	...	83
Denmark	336	...	112
Germany (W.)	56	...	56
Netherlands	784	896	...
United Kingdom	11,132	9,600	3,573
Korea	270	...	...
Hong Kong	56	...	249
Taiwan . . . . .	...	...	22
India	244	...	...
Other countries . . . . .	...	...	22
Total Exports:			
Ore and slabs	28,620	37,348	20,479
Zinc scrap, dross, ashes	64	48	124
Japan	25	...	...

French Copper Imports

(A. B. M. S.)

	(In metric tons)		
	Mar.	Apr.	May
Crude copper for refining (blister, black and cement)	11	813	...
United Kingdom	11	...	...
Belgian Congo	813	...	...
Refined	16,927	21,455	13,975
United States	5,229	10,796	5,997
Canada	1,885	816	805
Chile . . . . .	...	51	...
Belgium	5,839	4,746	3,661
Germany (W.)	112	145	213
Norway	305	153	178
United Kingdom	22	...	...
Belgian Congo	1,652	2,558	1,059
Rhodesia-Nyasaland	1,905	2,219	2,011

METALS, JULY, 1959

Canadian Lead Exports

(Dominion Bureau of Statistics)

	(In tons of 2,000 lbs.)		
	Feb.	Mar.	Apr.
Ore (lead content)	2,091	3,355	3,241
United States	2,091	3,355	3,241
Refined lead	6,376	11,831	7,836
United States	859	4,811	3,624
Uruguay . . . . .	...	88	102
Netherlands	56	...	...
United Kingdom	5,393	6,658	2,576
Japan	24	...	...
Taiwan . . . . .	...	44	132
Korea . . . . .	...	223	...
Other countries	44	7	58
Denmark . . . . .	...	...	1,232
Thailand . . . . .	...	...	112
Total Exports:			
Ore & refined	8,467	15,186	11,077
Pipe and tubing	3	3	...
Lead scrap	48	206	49

Copper Imports and Exports By Principal Countries

(A. B. M. S.)
Reported in ingots, slabs, etc., metric tons except where otherwise noted.

	IMPORTS		
	Feb.	Mar.	Apr.
U. S. (blister, s.t.)	21,844	23,636	20,678
(ore, etc., s.t.)	5,377	8,932	4,624
(ref., s.t.)	3,548	3,815	5,027
Belgium*	14,760	...	...
Denmark	412	252	...
France (crude)	813	11	813
(refined)	14,451	16,927	21,455
Italy	13,260†	...	...
Germany, W.	21,982	...	...
Netherlands	3,051	1,375	2,576
Norway	758	...	...
Sweden	6,682	5,376	...
Switzerland	2,169	3,018	4,555
U. K. (l.t.)	31,432	44,291	36,627
India blister- ref., l.t.)†	3,829	1,865	5,375
EXPORTS			
U. S. (ore and unref., s.t.)	618	401	38
(refined, s.t.)	20,816	19,404	20,571
Canada (refined, s.t.)	10,304	11,025	17,079
Belgium*	12,112	...	...
Finland†	610	1,583	1,064
Germany, W.	8,951	...	...
Norway	3,359	...	...
Sweden	796	...	...
U. K. (l.t.)	9,465	5,901	5,002
N. Rhodesia (blister & ref., l.t.)†	30,601	38,405	41,647

* Includes alloys.

† Includes old.

‡ January-February.

† British Bureau of Non-Ferrous Metal Statistics.

Canada's Nickel Exports

(Dominion Bureau of Statistics)

	(Refined, in oxides, matte, etc.)		
	(In Tons)	1957	1958
January	14,260	14,233	6,757
February	9,974	12,157	7,976
March	14,958	12,316	14,006
April	18,671	20,562	18,213
May	18,351	20,574	...
June	14,539	16,144	...
July	14,181	14,055	...
August	14,966	13,012	...
September	14,160	14,371	...
October	13,370	8,835	...
November	16,620	3,001	...
December	14,606	5,060	...
Year	178,656	154,220	...

French Zinc Imports

(A. B. M. S.)

	(In metric tons)		
	Feb.	Mar.	Apr.
Ore (gross weight)	18,315	13,974	18,022
Belgium . . . . .	...	...	2,308
Greece . . . . .	...	860	1,712
Italy	1,548	3,602	1,892
Norway	355	...	...
Yugoslavia . . . . .	...	...	1,100
Algeria	6,896	3,237	630
Morocco	4,552	4,411	10,380
Tunisia . . . . .	...	1,864	...
Belgian Congo	3,867	...	...
Australia	1,097	...	...
Slabs, bars, blocks, etc.	875	1,451	1,160
Belgium	633	1,360	620
Germany (W.)	50	...	...
Italy	182	91	528
Algeria	10	...	12

French Metal Exports

(A. B. M. S.)

	(In metric tons)		
	Feb.	Mar.	Apr.
LEAD			
Ore (gr. wt.)	1,055	704	268
Pig lead	2,631	1,032	444
Uruguay	90	...	71
Denmark	559	203	203
Germany (W.)	330	654	170
Sweden	508	...	...
Switzerland	245	50	...
United Kingdom	762	...	...
Other countries	137	125	...
Antimonial lead	253	52	160
ZINC			
Slabs, bars, blocks, etc. . . . .	...	...	521

U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

	(In tons of 2,240 lbs.)		
	Mar.	Apr.	May
(Gross Weight)			
Copper and copper alloys	44,291	36,627	37,171
U. S. Africa . . . . .	...	...	2,287
Rhodesia-Nyasaland	21,883	15,882	19,269
Canada	8,074	7,489	7,042
Belgium	4	2	8
Germany (W.)	38	23	19
Norway	400	200	200
Sweden . . . . .	...	1	...
United States	4,276	2,605	1,875
Chile	9,350	10,150	5,951
Belgian Congo	250	250	500
Other countries	16	25	20
Of which:			
Electrolytic	28,675	25,659	23,400
Other refined	5,230	4,870	5,288
Blister or rough	10,319	6,000	8,161
Wrought and alloys	67	98	322
Total	44,291	36,627	37,171

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL (Bureau of Census — Thousands of Pounds)

	Alu- minum	Copper	Mag- nesium	Zinc	Lead Die
1954 Total	607,764	834,557	25,572	474,741	18,396
1955 Total	833,058	1,011,748	27,892	781,254	21,045
1956 Total	801,136	966,473	36,168	88,069	20,734
1957					
Nov.	58,898	70,187	1,920	58,689	1,590
Dec.	53,102	65,708	1,533	49,597	1,399
Total	751,855	875,389	30,322	663,330	23,791
1958					
January	57,845	69,707	1,881	50,658	1,566
February	50,695	58,356	1,803	42,687	1,294
March	50,547	60,157	1,975	39,719	1,630
April	44,948	59,311	2,215	35,796	1,467
May	44,093	57,506	2,422	36,447	1,655
June	40,701	57,124	2,205	38,132	1,971
July	38,818	51,124	2,200	32,765	1,394
August	45,034	57,790	1,869	35,860	1,804
September	52,796	64,447	2,804	47,127	1,725
October	55,699	74,012	2,627	45,045	1,708
November	55,793	62,476	2,615	48,431	1,409
December	59,487	67,905	2,612	55,600	1,497
Total	596,816	739,915	27,228	508,297	18,920
1959					
January	62,927	66,874	2,151	53,347	1,571
February	62,486	69,589	2,162	48,779	1,285
March	73,351	78,641	2,129	57,600	1,765
April	73,040	82,577	2,462	57,311	1,862

Copper Castings Shipments

BY TYPE OF CASTING (Bureau of Census)

	Total	Sand	Mold	Permanent	Die	Other	All
1952 Total	1,009,910	910,862	63,865	8,259	26,924		
1953 Total	990,496	888,369	61,316	10,077	30,734		
1954 Total	834,557	751,804	48,849	6,480	27,394		
1955 Total	1,011,748	907,852	63,041	8,541	31,408		
1956 Total	966,113	866,404	57,522	10,023	32,134		
1957							
Oct.	81,836	74,391	3,693	1,057	2,695		
Nov.	70,187	63,944	3,006	862	2,375		
Dec.	65,708	59,806	3,046	888	2,168		
Total	875,389	789,819	44,746	10,776	30,048		
1958							
January	69,707	63,294	3,327	894	2,192		
February	58,356	52,579	3,202	796	1,779		
March	60,157	54,007	3,395	823	1,932		
April	59,311	53,271	3,385	949	1,705		
May	57,506	51,634	3,077	891	1,904		
June	57,124	51,967	3,001	839	1,317		
July	51,124	46,636	2,351	792	1,345		
August	57,590	52,981	2,425	682	1,702		
September	64,447	58,435	2,888	876	2,248		
October	74,012	67,564	3,239	790	2,419		
November	62,746	57,386	2,604	810	1,946		
December	67,905	61,119	3,535	1,059	2,192		
Total	739,985	667,255	36,529	10,201	22,681		
1959							
January	66,874	59,856	3,572	1,216	2,230		
February	66,589	62,593	3,557	1,176	2,263		
March	78,641	69,472	4,333	1,361	3,475		
April	82,577	73,346	4,640	1,328	3,263		

Nickel Averages

Electro, cathode sheets, 99.00%,
f.o.b. refinery, duty included

(Cents per pound)

	1956	1957	1958	1959		1956	1957	1958	1959
Jan.	64.50	74.00	74.00	74.00	Jan.	106.30	101.92	77.85	52.57
Feb.	64.50	74.00	74.00	74.00	Feb.	104.34	98.59	74.82	59.25
Mar.	64.50	74.00	74.00	74.00	Mar.	104.23	93.50	72.096	77.10
Apr.	64.50	74.00	74.00	74.00	Apr.	103.92	93.45	70.72	77.18
May	64.50	74.00	74.00	74.00	May	105.23	92.865	67.34	77.50
June	64.50	74.00	74.00	74.00	June	106.50	92.02	66.18	77.50
July	64.50	74.00	74.00	74.00	July	106.50	90.265	64.35	77.50
Aug.	64.50	74.00	74.00	74.00	Aug.	105.76	84.426	60.94	77.50
Sept.	64.50	74.00	74.00	74.00	Sept.	105.50	84.00	59.60	77.50
Oct.	64.50	74.00	74.00	74.00	Oct.	104.85	84.00	57.327	77.50
Nov.	64.50	74.00	74.00	74.00	Nov.	104.50	83.80	56.41	77.50
Dec.	72.48	74.00	74.00	74.00	Dec.	104.50	78.70	53.154	77.50
Aver.	65.165	74.00	74.00	74.00	Aver.	105.18	89.79	65.07	77.50

Platinum Averages

N. Y. MONTHLY QUOTATIONS (Dollars per Troy Ounce)

	1956	1957	1958	1959		1956	1957	1958	1959
Jan.	106.30	101.92	77.85	52.57	Jan.	106.30	101.92	77.85	52.57
Feb.	104.34	98.59	74.82	59.25	Feb.	104.34	98.59	74.82	59.25
Mar.	104.23	93.50	72.096	77.10	Mar.	104.23	93.50	72.096	77.10
Apr.	103.92	93.45	70.72	77.18	Apr.	103.92	93.45	70.72	77.18
May	105.23	92.865	67.34	77.50	May	105.23	92.865	67.34	77.50
June	106.50	92.02	66.18	77.50	June	106.50	92.02	66.18	77.50
July	106.50	90.265	64.35	77.50	July	106.50	90.265	64.35	77.50
Aug.	105.76	84.426	60.94	77.50	Aug.	105.76	84.426	60.94	77.50
Sept.	105.50	84.00	59.60	77.50	Sept.	105.50	84.00	59.60	77.50
Oct.	104.85	84.00	57.327	77.50	Oct.	104.85	84.00	57.327	77.50
Nov.	104.50	83.80	56.41	77.50	Nov.	104.50	83.80	56.41	77.50
Dec.	104.50	78.70	53.154	77.50	Dec.	104.50	78.70	53.154	77.50
Aver.	105.18	89.79	65.07	77.50	Aver.	105.18	89.79	65.07	77.50

Spot Straits Tin

(Straits, Open Market, N. Y.)

Monthly Average Prices

	1956	1957	1958	1959
Jan.	105.036	101.511	92.94	99.411
Feb.	100.803	101.132	93.915	102.785
Mar.	100.786	99.643	94.452	103.042
Apr.	92.268	99.304	92.988	102.505
May	96.994	93.347	94.512	103.125
June	94.589	98.05	94.708	104.25
July	96.143	96.52	94.892	....
Aug.	99.049	94.261	94.988	....
Sept.	103.809	93.406	94.101	....
Oct.	106.023	91.838	96.523	....
Nov.	110.921	89.236	99.118	....
Dec.	104.268	92.35	98.989	....
Aver.	101.475	96.301	95.177	....

Prompt Tin Prices

(Straits, Open Market, N. Y.)

Monthly Average Prices

	1956	1957	1958	1959
Jan.	104.768	101.347	92.653	99.351
Feb.	100.586	100.257	93.763	102.708
Mar.	100.524	99.476	94.363	103.042
Apr.	99.145	99.286	92.988	102.505
May	96.853	98.335	94.512	103.107
June	94.488	98.025	94.619	104.142
July	96.131	96.44	94.892	....
Aug.	98.924	94.159	94.976	....
Sept.	103.559	93.313	94.054	....
Oct.	105.716	91.848	96.455	....
Nov.	110.329	89.236	98.985	....
Dec.	104.00	92.34	98.96	....
Aver.	101.252	93.672	95.069	....

Quicksilver Averages

N. Y. Monthly Averages

Virgin, Dollars per 76-lb Flask

	1956	1957	1958	1959
Jan.	277.80	256.00	224.35	219.50
Feb.	270.29	256.00	229.39	219.50
Mar.	261.40	256.00	232.096	223.57
Apr.	267.22	256.00	233.06	239.52
May	267.675	256.00	229.48	245.86
June	260.69	256.00	229.00	241.64
July	256.06	256.00	230.25	....
Aug.	256.00	252.20	240.27	....
Sept.	256.00	248.58	241.12	....
Oct.	255.92	234.48	235.94	....
Nov.	255.13	228.33	230.05	....
Dec.	256.00	226.50	223.54	....
Aver.	261.71	248.51	230.96	....

METALS, JULY, 1959

Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	— Sold or Used —		Stocks end of month short tons
			Short tons	Value f. o. b. plant	
1957					
Total	1,647,714	1,579,035			
1958					
March	179,441	134,019	123,461	63,341,320	189,999
April	189,999	124,999	127,608	63,222,858	187,390
May	187,390	126,357	130,160	62,816,641	183,557
June	183,557	115,326	130,787	63,091,679	168,096
July	168,096	118,541	134,083	64,726,335	152,554
August	152,554	125,416	132,765	64,611,494	145,205
September	145,205	124,714	146,870	71,641,275	125,049
October	124,274	139,836	139,908	68,881,146	124,202
November	124,202	140,962	126,619	62,133,129	138,545
December	138,545	152,201	145,125	70,946,494	145,721
Total	1,565,556	1,595,067			
1959					
January	146,086	156,700	127,678	\$62,375,824	175,108
February	175,108	142,116	133,397	65,668,578	183,827
March	183,827	157,189	181,839	82,304,609	159,177

Virgin Aluminum

Ingot (30 lb.) 99½% Plus, Delivered

Monthly Average Prices

(Cents per pound)

	1956	1957	1958	1959
Jan.	24.40	27.10	28.10	26.80
Feb.	24.40	27.10	28.10	26.80
Mar.	24.60	27.10	28.10	26.80
Apr.	25.90	27.10	26.10	26.80
May	25.90	27.10	26.10	26.80
June	25.90	27.10	26.10	26.80
July	25.90	27.10	26.10	....
Aug.	26.70	28.10	26.77	....
Sept.	27.10	28.10	26.80	....
Oct.	27.10	28.10	26.80	....
Nov.	27.10	28.10	26.80	....
Dec.	27.10	28.10	26.80	....
Aver.	26.008	27.517	26.889	....

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS
(Bureau of Census — Thousands of Pounds)

	Total	Sheet,		Extruded Shapes & Tubing	Powder & Paste
		Plate, Foil, Rod & Bar	Wire & Cable		
1955 Total	2,805,500	1,542,368	365,391	812,311	35,854
1956 Total	2,870,101	1,577,601	398,602	782,398	28,017
1957					
November	186,974	114,618	31,501	64,197	1,716
December	177,520	96,078	21,363	54,872	1,480
Total	2,677,423	1,396,502	399,040	789,430	28,187
1958					
January	193,878	108,616	21,915	57,188	1,838
February	207,459	118,835	21,983	58,296	1,927
March	190,092	108,913	20,692	55,973	1,533
April	210,477	118,793	22,178	62,737	1,954
May	217,299	115,660	27,361	67,376	2,389
June	228,587	118,767	28,674	74,580	2,248
July	229,654	126,160	24,678	72,194	2,642
August	213,548	115,376	23,581	67,953	3,154
September	231,168	125,937	23,287	75,269	2,665
October	254,023	128,967	24,442	85,038	2,163
November	216,249	121,190	17,771	71,666	1,723
December	235,377	130,474	26,253	72,979	1,806
Total	2,624,911	1,441,385	285,355	821,249	25,742
1959					
January	235,463	132,361	26,480	70,309	2,246
February	230,733	131,564	21,740	71,364	2,028
March	271,642	161,285	21,940	81,276	2,578
April	293,554	166,942	25,468	93,475	3,178

Magnesium Wrought Products

Products Shipments

(Bureau of Census)

	(Thousands of Pounds)			
	1956	1957	1958	1959
Jan.	2,188	2,130	1,271	1,271
Feb.	1,901	2,522	1,280	1,691
Mar.	1,946	2,388	1,398	1,717
Apr.	2,279	2,511	1,479	2,089
May	2,462	2,230	1,443	....
June	2,302	1,881	1,709	....
July	2,002	1,428	1,227	....
Aug.	2,523	1,540	1,823	....
Sept.	2,031	1,501	1,807	....
Oct.	861	1,453	1,983	....
Nov.	2,141	1,230	1,662	....
Dec.	2,452	1,102	1,622	....
Total	24,975	21,915	18,702	....

Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

	(Thousands of Pounds)	Permanent			All Other
		Total	Sand	Mold	
1954 Total	609,066	155,738	213,968	232,726	6,800
1955 Total	833,058	171,757	298,115	354,804	8,282
1956 Total	801,036	171,763	245,421	376,108	7,736
1957 Total	751,656	144,121	232,326	369,086	...
1958					
January	57,845	10,724	18,082	28,937	...
February	50,695	9,601	15,456	25,579	...
March	50,547	9,311	15,255	25,918	...
April	44,948	9,531	13,369	21,956	...
May	44,093	9,312	13,648	21,091	...
June	40,701	8,644	13,679	18,292	...
July	38,818	8,658	12,342	17,714	...
August	45,034	9,034	14,426	21,505	...
September	52,796	10,261	16,241	26,254	...
October	55,699	10,932	17,189	27,511	...
November	55,793	10,539	16,942	28,264	...
December	59,487	10,874	18,970	29,579	...
Total	596,790	117,421	186,949	292,599	...
1959					
January	62,927	10,907	20,606	21,349	...
February	62,846	10,627	21,127	31,021	...
March	73,351	12,412	26,964	33,949	...
April	73,040	12,695	26,202	34,009	...

Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

	1956	1957	1958	1959
Jan.	170.00	170.00	155.00	145.00
Feb.	170.00	170.00	155.00	145.00
Mar.	170.00	170.00	155.00	145.00
Apr.	170.00	170.00	155.00	120.00
May	170.00	170.00	155.00	120.00
June	170.00	170.00	155.00	120.00
July	170.00	170.00	155.00	....
Aug.	170.00	170.00	155.00	....
Sept.	170.00	170.00	152.60	....
Oct.	170.00	170.00	145.00	....
Nov.	170.00	170.00	145.00	....
Dec.	170.00	166.40	145.00	....
Aver.	170.00	169.70	152.30	....

Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies				Calculated weekly production capacity, all companies	
	OPEN HEARTH	BESSEMER	ELECTRIC	TOTAL		
Net tons capacity	% of capacity	Net tons capacity	% of capacity	Net tons capacity	% of capacity	
1954 Total	80,327,494	73.6	2,545,104	53.2	5,436,054	52.0
1955 Total	102,840,585	91.6	3,227,997	67.4	9,147,567	81.2
1956 Total	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3
December	6,783,262	68.3	108,337	28.3	528,686	51.7
Total	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3
1957	112,714,996	84.5	115,216,149	89.8	115,216,149	89.8
December	6,783,262	68.3	108,337	28.3	528,686	51.7
Total	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3
1958	112,714,996	84.5	115,216,149	89.8	115,216,149	89.8
January	6,085,124	58.6	121,338	35.5	547,450	44.8
February	5,252,112	56.0	81,597	26.4	448,614	40.6
March	5,598,944	53.9	122,317	35.7	533,361	43.6
April	4,875,619	48.5	109,433	33.1	547,929	46.3
May	5,602,123	53.7	110,366	32.3	558,670	48.2
June	6,378,942	63.4	88,125	26.6	660,413	55.8
July	5,712,587	55.0	114,218	33.4	595,500	48.6
August	6,481,815	62.4	134,135	39.3	670,383	54.8
September	6,769,660	67.3	103,194	31.2	737,816	62.3
October	7,795,641	75.0	148,458	43.4	873,779	71.5
November	7,572,555	75.3	145,867	44.1	850,896	71.9
December	7,764,000	74.7	117,000	34.2	832,000	68.1
Total	75,888,392	62.0	1,396,348	34.7	7,972,623	55.4
1959	82,280,985	77.1	120,005	39.5	729,675	63.7
January	8,540,000	88.0	129,000	47.0	757,000	73.1
February	10,216,474	95.1	184,892	60.9	929,781	81.1
March	9,884,332	95.0	196,000	66.2	964,850	87.0
April	10,117,961	94.2	200,887	66.1	1,024,401	89.4
May	9,522,000	91.6	186,000	66.3	941,000	84.8
June	10,908,000	89.9	186,000	84.8	10,908,000	89.9

Blast Furnace Output

(American Iron and Steel Institute)

Period	net tons				1951	1952	1953	1954	1955	1956	1957	1958	
	Pig Iron	Ferro-manganese	Spiegel	Total Capacity	Total	For Sale	Use	Total	For Sale	Use	Total	For Sale	Total
1950	48,810,272	678,896	65,484,168	91.6	2,101,604	1,507,413	594,191	1,925,116	1,476,552	448,767	1,829,277	1,290,016	431,330
1951	70,487,800	745,881	71,282,761	98.8	1,184,096	880,158	303,938	1,150,674	1,156,745	2,611,229	1,184,096	880,158	303,938
1952	61,828,665	629,926	62,158,891	84.2	1,530,694	1,166,706	363,988	1,931,987	1,512,290	416,697	1,931,987	1,512,290	416,697
1953	74,987,721	855,038	75,842,759	95.5	160,054	124,416	35,638	162,498	124,549	37,949	164,575	125,431	39,144
1954	88,119,882	868,785	868,888,117	71.6	164,575	125,431	39,144	153,647	119,353	34,294	122,018	90,037	31,981
1955	77,114,073	868,785	77,800,881	92.7	146,926	111,080	34,846	145,926	111,080	34,846	120,722	94,717	26,005
1956	6,978,064	58,884	6,932,645	98.7	139,002	105,611	33,391	146,397	113,216	33,181	121,715	98,436	28,879
1957	6,977,457	58,614	7,036,091	100.1	103,297	79,708	23,589	106,233	82,195	24,038	120,787	92,125	28,602
1958	7,268,743	65,841	7,334,584	101.0	95,326	66,266	65,593	93,3	75,965,475	88,947	1,766,191	1,261,301	406,444
1959	75,301,134	664,341	75,965,475	88.9	120,944	96,121	22,343	87,002	66,086	20,918	120,722	94,717	26,005
1960	7,209,547	72,826	7,282,373	98.8	120,722	94,717	26,005	103,297	79,708	23,589	106,233	82,195	24,038
1961	6,596,133	61,973	6,658,106	100.0	103,297	79,708	23,589	106,233	82,195	24,038	95,326	75,965,475	88,947
1962	7,179,167	67,779	7,246,879	98.3	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1963	6,810,102	60,784	6,870,886	96.3	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1964	6,879,881	65,566	6,945,447	94.2	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1965	6,625,901	66,031	6,691,932	90.8	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1966	6,719,763	61,988	6,781,751	92.0	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1967	6,569,074	58,837	6,627,911	92.9	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1968	6,454,450	65,028	6,519,478	88.4	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1969	5,711,242	68,637	5,779,879	81.0	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1970	5,212,624	69,175	4,854,444	62.8	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1971	78,557,011	782,660	79,339,671	91.4	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1972	6,783,247	69,175	4,854,444	62.8	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1973	4,799,955	31,374	4,851,329	62.1	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1974	5,041,042	31,348	5,072,390	67.8	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1975	5,895,996	36,963	5,872,958	76.0	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1976	5,907,888	39,275	5,946,163	79.5	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1977	6,025,385	47,505	6,072,890	78.6	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1978	57,298,644	465,456	37,298,644	63.5	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1979	6,260,395	48,572	6,211,823	77.9	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1980	6,047,398	45,274	6,192,672	85.3	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1981	7,461,760	48,291	7,510,051	93.4	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1982	7,358,372	54,234	7,392,606	95.0	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602
1983	7,683,759	64,237	7,747,996	96.4	120,944	96,121	22,343	121,715	98,436	28,879	120,787	92,125	28,602

Galvanized Sheet Shipments

(American Iron & Steel Institute)

1956	1957	1958	1959	1956	1957	1958	1959																																																																															
Jan.	269,464	235,902	196,649	279,244	Jan.	31,455	30,304																																																																															
Feb.	272,997	205,048	167,627	281,637	Mar.	291,193	206,851	196,885	311,961	Feb.	29,451	24,602	Apr.	266,728	196,585	206,368	328,759	May	272,741	206,557	231,318	317,059	Mar.	36,794	46,706	June	279,008	239,033	277,180	317,600	July	167,247	239,883	37,628	64,110	402,521	689,064	Aug.	276,048	186,790	253,263	June	42,850	Sept.	266,803	183,952	258,723	July	45,481	422,776	Oct.	278,637	212,886	290,157	Aug.	46,037	464,439	Nov.	265,185	190,380	253,909	Sept.	43,217	525,739	Dec.	239,178	159,363	266,472	Oct.	60,261	763,361	Total	2,957,991	2,392,637	2,828,848	Nov.	14,596	113,134
Mar.	291,193	206,851	196,885	311,961	Feb.	29,451	24,602																																																																															
Apr.	266,728	196,585	206,368	328,759	May	272,741	206,557	231,318	317,059	Mar.	36,794	46,706	June	279,008	239,033	277,180	317,600	July	167,247	239,883	37,628	64,110	402,521	689,064	Aug.	276,048	186,790	253,263	June	42,850	Sept.	266,803	183,952	258,723	July	45,481	422,776	Oct.	278,637	212,886	290,157	Aug.	46,037	464,439	Nov.	265,185	190,380	253,909	Sept.	43,217	525,739	Dec.	239,178	159,363	266,472	Oct.	60,261	763,361	Total	2,957,991	2,392,637	2,828,848	Nov.	14,596	113,134													
May	272,741	206,557	231,318	317,059	Mar.	36,794	46,706																																																																															
June	279,008	239,033	277,180	317,600	July	167,247	239,883	37,628	64,110	402,521	689,064	Aug.	276,048	186,790	253,263	June	42,850	Sept.	266,803	183,952	258,723	July	45,481	422,776	Oct.	278,637	212,886	290,157	Aug.	46,037	464,439	Nov.	265,185	190,380	253,909	Sept.	43,217	525,739	Dec.	239,178	159,363	266,472	Oct.	60,261	763,361	Total	2,957,991	2,392,637	2,828,848	Nov.	14,596	113,134																										
July	167,247	239,883	37,628	64,110	402,521	689,064																																																																															
Aug.	276,048	186,790	253,263	June	42,850																																																																															
Sept.	266,803	183,952	258,723	July	45,481	422,776																																																																															
Oct.	278,637	212,886	290,157	Aug.	46,037	464,439																																																																															
Nov.	265,185	190,380	253,909	Sept.	43,217	525,739																																																																															
Dec.	239,178	159,363	266,472	Oct.	60,261	763,361																																																																															
Total	2,957,991	2,392,637	2,828,848	Nov.	14,596	113,134																																																																															

* Combined with August figures.

Steel Ingot Operations

(Percentage of Capacity as Reported

by

American Iron & Steel Institute)

Week

Beginning	1956	1957	1958	1959
Jan.	97.6	98.4	56.1	76.2
Feb.	98.6	96.4	57.0	73.6
Mar.	99.0	96.6	55.5	74.6
Apr.	100.4	97.6	54.0	72.6
May	99.3	97.1	54.0	76.9
June	99.1	97.7	53.5	83.8
July	100.0	97.8	50.9	83.7
Aug.	98.8	96.0	54.6	88.5
Sept.	99.3	97.1	53.1	90.3
Oct.	100.0	93.8	52.4	92.0
Nov.	100.6	93.5	52.5	92.9
Dec.	101.1	92.4	50.6	92.9
Jan.	100.9	90.4	46.8	93.3
Feb.	100.2	88.7	47.9	93.5
Mar.	100.5	87.0	47.8	94.2
Apr.	100.9	80.4	46.8	93.8
May	100.2	87.5	47.8	92.0
June	100.7	86.5	45.0	92.0
July	103.4	85.2	44.9	92.5
Aug.	103.0	84.0	41.7	87.8

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